

CAPE OF GOOD HOPE.

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REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR THE COLONY

ON THE

PUBLIC HEALTH

TOGETHER WITH

THE HEALTH REPORTS OF DISTRICT SURGEONS  
AND LOCAL AUTHORITIES

For the Half-Year Ended 30th June, 1904.

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Presented to both Houses of Parliament by Command of His Excellency the Governor

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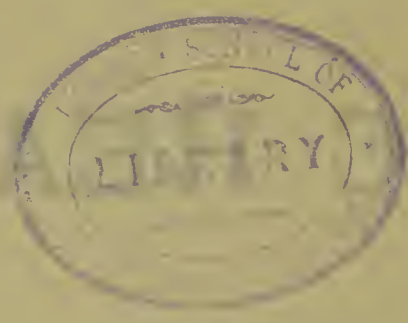
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# REPORT

OF THE COMMITTEE ON THE MEDICAL EDUCATION OF THE PHYSICIAN



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# CAPE OF GOOD HOPE.

Report on the Public Health of the Colony, and  
Reports of District Surgeons and Local  
Authorities for the Half-Year ended 30th  
June, 1904.

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## PART I.

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REPORT OF THE MEDICAL OFFICER OF HEALTH  
FOR THE COLONY.

55, Parliament Street,  
Cape Town, 22nd March, 1905.

To the Honourable,  
The Colonial Secretary.

SIR,—I have the honour to present a Report on the Public Health and Sanitation of the Colony during the Half-Year ended 30th June, 1904.

Owing to the change necessitated by Parliament having decided that the Annual Reports for presentation to it should cover the Financial instead of the Calendar Year, the present report deals only with the Half-Year, which is the period intervening between the date of my last Annual Report and the end of the Financial Year.

It is, however, not possible to make any satisfactory report for an abbreviated period such as this. Vital Statistics for half a year are apt to be vitiated by the effects of the "seasonal variation of disease," and, in any case, no useful comparison can be instituted between such statistics and those for a complete year.

It is sincerely to be hoped that Parliament will see its way to reverse its decision to require statistical reports of this nature to be made up to the end of the Financial instead of the Calendar Year, inasmuch as Vital Statistics derive their greatest value by comparison with similar statistics in regard to other places, but as such statistics elsewhere all the world over are recorded in Calendar years any such comparison is rendered extremely difficult.

One of the greatest difficulties encountered in preparing an early report on the Health of the Colony is due to the impossibility of obtaining within a reasonable time the Vital Statistics afforded by the registration of Births and Deaths.



The Births and Deaths Registration Act of 1894 does not require Deaths to be registered in the case of Urban areas until one month after their occurrence, and in the case of Rural areas not until three months, while the registration of births, whether in Urban or Rural areas, need not take place until three months have elapsed. It results that until three months after the close of the year the whole of the births and deaths during that year will not have been registered, and, as a matter of fact, many are not recorded for a considerable time after the lapse of that period. Thereafter, it takes weeks for the final returns of the Deputy Registrars to reach the Registrar-General from the different parts of the Colony, and he, on his part, owing to the limited extent of his staff, requires many months for their combination and tabulation, so that a very considerable time must necessarily elapse after the close of the year before the Medical Officer of Health is in possession of the statistical material for the preparation of the Tables required for his report. It follows from this that the report on the Health of the Colony can never be presented until long after the close of the year with which it deals.

On the other hand, much of the matter to be reported upon by the Medical Officer relates to administrative and other things which can be considered independently of Vital Statistics and which can, therefore, easily be dealt with soon after the end of the year, and, indeed, which, if they are not promptly reported upon, become stale and of little public interest.

Probably it would be better for the Medical Officer to prepare two Annual Reports—one immediately at the close of the year, which by preference should be a Calendar year, dealing with administrative matters generally, and the second dealing with the Vital Statistics of the Colony for the Calendar year as soon as these become available. Unless some such arrangement be adopted, my report must continue to be belated, and, therefore, lose much in practical usefulness.

### *Vital Statistics for the Year 1903.*

#### *Urban and Rural.*

For the reasons above given the Vital Statistics dealt with in this report are for the whole of the Calendar year 1903. In Annexure "A" will be found a series of tables giving for this period, for the thirty-five Chief Towns of the Colony, the Deaths and Rates of Mortality from certain specified diseases and groups of diseases, distinguishing between European and Coloured persons.

These thirty-five towns, which then contained an aggregate estimated population of 405,023 persons, have been selected as they constitute the great bulk of the really Urban areas of the Colony. There are, however, a number of villages and small towns which, although more or less Urban in character, are on the whole more rural than urban.

It is unfortunate that I am unable to furnish any useful Vital Statistics concerning these places, or, indeed, of the remaining or entirely rural portion of the population of the Colony. This is due to the divergent nature of the different records upon which we have to work. For example, the areas which have been taken respectively as Urban and Rural in the 1904 Census differ materially from those of the preceding Census of 1891, many places which were taken as Urban in the one being considered as Rural in the other and *vice versa*; while, again, the areas treated by the



Registrar-General as Urban in connection with the registration of Births and Deaths differ from both of these ; and, finally, the Registrar-General's Statistical Year is neither a Calendar nor a Financial Year, but ends annually on the 30th September. These differences would not so much matter if it were possible to make the necessary corrections, but unfortunately no sufficient data are available for this purpose, so that we possess neither reliable numbers of the deaths nor correct populations on which to calculate the rates of Mortality. This state of things is to be deeply regretted, as it seriously detracts from the value of such records.

However, by means of certain partial corrections, approximate results have been obtained, and within the limits of comparatively small error I give the following as the approximate rates of mortality for Europeans and Coloured persons during the twelve months ended on the 30th September, 1903, in the urban and rural areas respectively of the Colony. These rates will serve to indicate the markedly inimical effect of residence in urban areas on the rate of mortality both of Europeans and Coloured, and especially of the latter.

TABLE 1.—Showing the approximate rates of mortality per thousand of inhabitants in the urban and rural portions of the Colony Proper during the year ended on the 30th September, 1903.

	Europeans.	Coloured.	All Races.
All Rural areas ... ..	10·69	17·13	15·31
All Urban areas... ..	17·47	48·51	32·77
The Thirty-five Chief Towns ... ..	17·23	48·21	31·40
Urban areas other than the Thirty-five Chief Towns ... ..	18·24	49·09	36·16

#### *Mortality in the Chief Towns.*

Concerning the Thirty-five Chief Towns of the Colony, we have been preserving in this Office for many years, Mortality Statistics which it is hoped will be of value now that a new Census of the populations is available. In the absence of this such statistics have remained of no practical use, as it is of small moment to know that a certain number of deaths has occurred among a community if the number and the age and race compositions of the community are entirely unknown.

In the Tables attached to this report the estimated populations of the different towns have been calculated as at mid-year on the 30th June, 1903, on the basis of the Census returns of 1891 and 1904. But an interval of thirteen years is very much too great to enable reliable estimations of population in the intervening years to be made, and this is particularly so in communities such as our chief towns in which fluctuating immigration plays so great a part in the augmentation of the population.

The actual numbers of deaths and, as far as Europeans are concerned, the causes of death in these towns may be accepted as being tolerably accurate, inasmuch as no burial can take place without a burial order being first obtained, which is granted by the Deputy Registrar on registration of the death, or by the Resident Magistrate after due enquiry, and inasmuch as a Medical Certificate to the cause of death is generally insisted upon in the case of



European deaths, it follows that comparatively few such remain uncertified. But in the case of Coloured deaths a much larger proportion, about 18 per cent. are uncertified, although enquiry as to the probable cause of death is made in such cases by the Registrar, who, however, is a layman. Thus, of 3,517 deaths of Europeans and 8,568 of Coloured persons and Natives registered in these towns during the year 1903, the numbers not medically certified to were 92 and 1,486, respectively. There is no question but that a Medical Certificate should be insisted upon in nearly all cases, whether European or Coloured, and more especially with regard to deaths of Coloured infants, of whom, as will be presently pointed out, there are grounds for believing many die from wilful neglect.

The following Table 2 displays the rates of mortality in these Chief Towns during the Calendar Year 1903, for Europeans, Coloured and All Races.

It may be here mentioned that under the term "Coloured" are included all Aboriginal Natives, Coloured or Half Caste persons, Malays and Asiatics.

TABLE 2.—Showing in regard to each of the thirty-five chief Towns of the Colony the total number of Deaths—European and Coloured—registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated populations :—

Names of Towns.	EUROPEANS.		COLOURED.		ALL RACES.	
	Total Deaths.	Death Rate.	Total Deaths.	Death Rate.	Total Deaths.	Death Rate.
Cape Town ... ..	628	14·67	1,305	39·58	1,933	25·51
Suburban Municipalities ( <i>i.e.</i> , Woodstock, Mowbray, Claremont, Wynberg, Maitland and Rondebosch) ... ..	796	16·50	1,354	46·38	2,150	27·76
Green Point and Sea Point ... ..	70	10·06	18	13·65	88	10·63
Simon's Town and Kalk Bay—Muizenberg ... ..	69	10·41	122	38·14	191	19·43
Kimberley ... ..	217	16·11	895	43·72	1,112	32·76
Beaconsfield ... ..	45	15·69	468	71·41	513	54·45
Port Elizabeth ... ..	337	15·78	645	58·84	982	30·39
East London ... ..	179	13·02	245	25·42	424	18·13
Grahamstown ... ..	122	17·12	332	51·60	454	33·48
Uitenhage ... ..	80	12·51	278	53·20	358	30·80
Paarl ... ..	91	18·58	273	44·44	364	32·97
Graaff-Reinet ... ..	70	17·63	239	41·19	309	31·61
King William's Town ... ..	93	15·95	103	29·25	196	20·96
Queenstown ... ..	84	20·97	306	59·54	390	42·65
Oudtshoorn ... ..	85	21·28	306	67·97	391	46·02
Worcester ... ..	48	13·81	228	53·85	276	35·79
Cradock ... ..	86	29·09	259	56·86	345	45·93
Beaufort West ... ..	68	31·78	244	78·03	312	59·24
Aliwal North ... ..	39	22·98	137	38·64	176	33·57
Somerset East ... ..	35	19·53	117	36·00	152	30·15
Stellenbosch ... ..	32	13·33	149	60·69	181	37·27
Wellington... ..	35	15·03	79	32·96	114	24·13
Mossel Bay ... ..	34	21·25	107	43·94	141	34·94
Malmesbury ... ..	38	19·98	84	46·33	122	32·84
George ... ..	30	16·17	71	43·45	101	29·45
Robertson ... ..	34	17·04	53	45·11	87	27·44
Burghersdorp ... ..	30	24·00	91	58·11	121	42·97
Swellendam ... ..	15	13·50	32	25·62	47	19·92
Prince Albert ... ..	27	26·84	28	37·38	55	31·34
Grand Total ... ..	3,517	16·00	8,568	46·25	12,085	29·84

From this Table it will be seen that the rate of mortality varies very markedly in the different towns, being, for example, lowest in the Municipality of Green and Sea Point, where the mortality among Europeans is 10·06 and



among coloured persons 13·65 per thousand, and highest in the town of Beaufort West, where the mortality among Europeans is 31·78 and among Coloured persons 78·03 per thousand.

It must not, however, be taken for granted that these variations are entirely due to sanitary or other causes peculiar to the locality. Some of the difference undoubtedly depends upon difference in the age and sex composition of the communities. That is, whether the population consists of a majority of persons who are of an age or the sex most liable to illness and death. It scarcely needs a moment's thought to satisfy oneself that a death rate of 10·06 per thousand is not a death rate which could obtain in a normal community composed of normal numbers of persons at all ages, that is, an old established community whose population is replenished only by births and not by immigration, inasmuch as in such a population a death rate of only 10 per thousand would mean that every person in that community would have to live to an average age of a hundred years, or allowing for the premature deaths of infants and young persons, that many would have to live to twice or three times that age. The reason, therefore, that this Municipality can show so small a death rate as the above is that its population consists largely of young adults at ages not liable to mortality.

It is unfortunate that the materials were not available at the time these Tables were constructed, by which a correction for age composition could be made, but nevertheless there is not the least doubt that any possible correction for age and sex composition of the population would be unable to reduce such a death rate as that of 78 per thousand obtaining at Beaufort West, to reasonable proportions, and we may, therefore, rest assured that any town displaying rates of mortality of such a magnitude cannot be other than intensely insanitary, or that the laws of health are neglected by its inhabitants, and I may say that the indication afforded by these returns of mortality are amply borne out by our knowledge of the places themselves. We know for example that Green and Sea Point is one of the healthiest and least insanitary places in the Colony, and we know that Beaufort West has for years past enjoyed the unenviable position of being in these respects one of the worst.

### *Infant Mortality.*

One of the surest barometers of the health conditions under which a community, or a part of a community, is living, is that of the extent of its infant mortality; that is, of the mortality of children under one year of age. The importance of this test depends upon two facts, namely, that, on the one hand, it is this portion of the population which is most particularly sensitive to insanitary and unhealthful conditions, while, on the other hand, the ratio of deaths occurring is obtained with very considerable accuracy, and independently of any Census enumeration of the population, by the simple means of calculating the number of deaths under one year on the number of births recorded during that year.

In the accompanying Table 3 is given for each of the Thirty-five Chief Towns, the number of births, European and Coloured, registered during the year 1903, the number of deaths under one year registered during the same period, and the rate of mortality per thousand of births.



TABLE 3.—Showing for the Thirty-five Chief Towns of the Colony, separately for Europeans, Coloured, and All Races (a) the number of Births registered for the year 1903 ; (b) the Birth-rate per 1,000 of the estimated population in the calendar year 1903 ; (c) the number of Deaths under one year of age registered for the year 1903, and (d) the Death-rate under one year of age, calculated per 1,000 Births for the year 1903.

Chief Towns.	No. of Births Registered for 1903.			Birth Rate per 1,000 of Estimated Population, 1903.			Number of Deaths under 1 year of age, 1903.		Death Rate under 1 year calculated per 1,000 Births, 1903.		Uncertified Deaths under 1 year.	
	Euro-pean.	Coloured.	All Races.	Euro-pean.	Coloured.	All Races.	Euro-pean.	Coloured.	Euro-pean.	Coloured.	Euro-pean.	Coloured.
Cape Town ...	918	1,664	2,582	21·44	50·47	34·07	128	463	139·43	278·25	...	7
Suburban Municipalities* ...	1,661	1,761	3,425	34·43	60·43	44·23	273	509	164·36	288·55	2	10
Green Point and Sea Point ...	173	31	204	24·86	23·50	24·65	19	5	109·83	161·29	...	...
Simon's Town and Kalk Bay-Muizenberg ...	112	120	232	16·89	37·51	23·60	24	35	214·29	291·67	...	2
Port Elizabeth ...	685	735	1,420	32·08	67·05	43·94	104	199	151·82	270·75	2	9
Kimberley ...	443	392	835	32·88	19·15	24·60	66	177	148·98	451·55	3	16
Beaconsfield ...	114	180	294	39·75	27·46	31·20	18	144	157·89	800·00	1	88
Grahamstown ...	202	266	468	28·34	41·34	34·51	31	106	153·47	398·50	1	48
East London ...	452	235	687	32·87	24·38	29·37	68	81	150·44	344·60	1	4
King William's Town ...	193	123	316	33·09	34·93	33·79	23	41	119·17	333·33	2	34
Paarl ...	130	314	444	26·54	51·12	40·21	27	90	207·69	286·62	2	1
Graaff-Reinet ...	143	275	418	36·01	47·39	42·77	29	99	202·80	360·00	3	40
Uitenhage ...	216	252	468	33·77	48·22	40·27	26	77	120·37	306·35	...	30
Cradock ...	129	214	343	13·61	46·98	45·67	28	85	217·05	397·20	4	70
Worcester ...	115	243	358	33·07	57·39	46·43	17	96	147·83	395·06	4	35
Oudtshoorn ...	162	332	494	40·55	73·75	58·14	31	129	191·36	388·55	3	38
Queenstown ...	149	270	419	37·20	52·54	45·82	26	123	174·50	455·55	...	36
Stellenbosch ...	56	177	233	23·32	72·10	47·98	6	55	107·14	310·73	1	14
Beaufort West ...	114	152	266	53·27	48·61	50·50	23	68	201·75	447·37	1	31
Somerset East ...	72	139	211	40·18	42·77	41·85	13	36	180·56	258·99	2	12
Robertson ...	71	91	162	35·59	77·45	51·10	8	15	112·68	164·84	1	3
Wellington ...	37	106	143	15·89	44·22	30·26	14	27	378·38	254·72	3	10
Malmesbury ...	51	92	143	26·81	50·74	38·49	7	27	137·25	293·48	...	3
Aliwal North ...	51	140	191	30·05	39·48	36·43	15	51	294·12	364·29	1	9
George ...	59	67	126	32·85	41·00	36·73	9	20	152·54	298·51	2	12
Mossel Bay ...	59	154	213	36·88	63·24	52·79	14	50	237·29	324·68	2	18
Burghersdorp ...	72	63	135	57·60	40·23	47·94	9	34	125·00	539·68	3	20
Prince Albert ...	51	39	90	50·70	52·07	51·28	10	8	196·08	205·13	3	2
Swellendam ...	32	76	108	28·80	60·85	45·76	5	13	156·25	171·05	2	5
	6,722	8,706	15,428	30·59	46·99	38·09	1,071	2,863	159·33	328·85	49	607

\*Includes Woodstock, Mowbray, Claremont, Wynberg, Maitland and Rondebosch.

If we look at this Table it will be seen that, taking the whole of these towns, there were registered during the year 1903, 6,722 European births and 8,706 Coloured, while 1,071 European and 2,863 Coloured children under one year of age died. These figures give a Death Rate per thousand of births, or a mortality per thousand of infants under one year of age, of 159·33 for Europeans and 328·25 for Coloured.

In England and Wales, according to the Report of the Registrar-General for the year 1898, the last report available, the proportion of deaths of infants under one year of age to registered births was 160 per thousand, which was an increase of 11 per thousand of the proportion of the preceding ten years. Taking this, therefore, as a standard, in all these towns combined the European infant mortality is not excessive, but the Coloured mortality is more than double what it should be.



If, however, we look at the individual towns we see that a great variation occurs in the rate of mortality, both among Europeans and Coloured; thus, for example, taking Europeans, some towns appear to be exceptionally healthy, while others are the reverse; thus Green and Sea Point with a European infant mortality of 109 per thousand, Stellenbosch with one of 107 and Robertson with one of 112 per thousand, present a very satisfactory state so far as Europeans are concerned. On the other hand, there are others which by their European mortality alone indicate that they are extremely unsatisfactory, either owing to improper sanitation or to local conditions, such as Wellington with a rate of 378 per thousand, Mossel Bay with 237, Cradock with 217, and Simon's Town. Kalk-Bay and Muizenburg with 214 per thousand.

But when we come to the Coloured rates of Infant mortality, we are struck with, in most cases, a truly appalling state of things; for example, in Beaconsfield the infant mortality amounts to no less than 800 per thousand of births, that is to say, for every one thousand children born, 800 die before they reach the age of one year. In Kimberley, 451 per thousand is the rate: in Queenstown 455; in Beaufort West, 447; in Burghersdorp, 539; in Aliwal North, 364; in Grahamstown, 398; while in many other cases the rate exceeds 300 per thousand.

There is no reasonable doubt but that a large proportion of the infant mortality among the Coloured Races is due not only to insanitary surroundings, but largely to neglect and improper feeding.

The extent to which this mortality is thus produced is brought out by a consideration of the causes of death of infants under one year. In the following Table 4 the number of deaths in the thirty-five chief towns from some of the more preventable complaints are shown.

TABLE 4, showing the number of Deaths of Infants under one year of age in the thirty-five chief towns during the calendar year 1903 from the chief preventable causes.

	Europeans.	Coloured.	All Races.
Measles ... ..	14	64	78
Whooping Cough ... ..	16	50	66
Diphtheria ... ..	4	30	34
Tuberculosis ... ..	41	112	153
	75	256	331
Diarrhœa, Enteritis and Marasmus ...	473	946	1,419
Bronchitis and Pneumonia ... ..	115	639	754
Dentition ... ..	8	27	35
Convulsions ... ..	74	323	397
Debility, Atrophy, Inanition and Premature Birth ... ..	180	358	538
	850	2,293	3,143
All Other Causes ... ..	146	314	460
Total... ..	1,071	2,863	3,934

It would seem from the above table that a total of over 86 per cent. of the deaths of European and over 89 per cent. of those of Coloured Infants under one year is due to disease almost entirely of a preventable nature. By far the greater number—over one-

third—die from bowel complaints mainly caused by unhealthy feeding, while another quarter die from indefinitely described causes, such as dentition, convulsions, debility and inanition—other names for neglect. Bronchitis and pneumonia account for about 19 per cent., and infectious diseases cause another 8 per cent. mortality. The bulk of the mortality from measles is due to chest complaints consequent upon neglect.

*Uncertified Deaths.*

TABLE 5.—Showing the proportion of Uncertified Deaths registered in the Thirty-five Chief Towns during the Calendar Year 1903.

	Under One Year.		Over One Year and Under 5 Years.		Over 5 Years.		Total All Ages.	
	Number.	Percentage Proportion of Uncertified Deaths.	Number.	Percentage Proportion of Uncertified Deaths.	Number.	Percentage Proportion of Uncertified Deaths.	Number.	Percentage Proportion of Uncertified Deaths.
Europeans ...	49	4·6	10	2·6	33	1·6	92	2·6
Coloured ...	607	21·2	297	18·4	582	14·29	1486	17·3
Total all Races...	656	16·7	307	15·4	615	10·0	1578	13·1

I have already alluded to the fact that a considerable proportion of the deaths of Coloured persons in these towns is medically uncertified. By a reference to the above Table 5 it will be seen that 607 of the 2,863 deaths of Coloured infants under one year of age were uncertified, while of children over 1 and under 5 years of age, 297 out of 1,616 deaths were uncertified. Thus, of the 1,486 uncertified Coloured deaths at all ages no less than 904 were in children under 5 years of age, or a percentage of uncertified deaths of 20·18 as against a percentage of 14·29 among persons over the age of five. As a rule the number of uncertified deaths is greater in the towns in which the greatest infant mortality occurs, but apart from this in some of the towns the number of uncertified deaths is extraordinary. For example, out of 144 coloured deaths under one year of age at Beaconsfield no less than 88 were uncertified, and out of 85 at Cradock 70 were uncertified. In the case of Beaconsfield the District Surgeon there and the Medical Officer to the Kimberley Board of Health have both from time to time drawn attention to the extent of this uncertified infant mortality, but I regret that, so far, this has not resulted in a larger number of Inquests being held into such deaths. In some of the larger towns, as Cape Town, there is evidence that the practice of boarding out infants who are encumbrances is increasing, and the mortality among such infants is suspiciously high. I am of opinion that it would be wise if Parliament considered the question of the necessity for legislation for protecting infant life in this Colony on lines similar to those adopted in the United Kingdom.



*Rates of Mortality at all Ages.*

It is, however, not alone among infants that preventable disease plays havoc. It is, indeed, responsible for the greater part of the mortality taking place at all ages of life in the Thirty-five Chief Towns.

In the accompanying Table 6 is shown the extent of the mortality occurring from the different groups of preventable disease :—

TABLE 6.—Showing the Annual Rate of Mortality from Preventable Disease per thousand of the European and Coloured Populations in the Thirty-five Chief Towns during the year 1903, together with the corresponding Annual Rates of Mortality, as far as ascertainable, recorded in England and Wales during the decennial period 1881-90.

DISEASE.	Annual Rate of Mortality per Thousand of the Population at all Ages.			
	European.	Coloured.	All Races.	England and Wales during decennium 1881-90.
Tuberculosis ... ..	1·64	8·09	4·59	2·42
Bronchitis ... ..	0·58	3·30	1·82	2·14
Pneumonia ... ..	1·13	7·63	4·11	1·07
Total ...	3·35	19·02	10·52	5·63
Typhoid Fever, "Fever," Continued Fever, etc. ... ..	0·56	0·92	0·72	0·23
Enteritis and Gastro-Enteritis ...	2·09	4·33	3·11	1·10*
Diarrhoea and Dysentery ... ..	1·05	4·38	2·57	0·67
Total ...	3·70	9·63	6·40	2·00
Other Infectious, Contagious and parasitic diseases ... ..	1·25	4·18	2·61	...
"Dentition," "Convulsions" and "Debility" ... ..	0·71	2·97	1·74	...
Total Mortality from Preventable Disease ...	9·01	35·80	21·27	..
Mortality from all Other Causes ...	6·99	10·45	8·57	...
Total Mortality ...	16·00	46·25	29·84	19·08

\* This is the English Registrar-General's group "Diseases of the Digestive System," which includes, *inter alia*, sore throat, quinsy, teething, and a large group of liver diseases which are not included in the Colonial rates of mortality from "Enteritis and Gastro-Enteritis."

It will be observed from the above that among Europeans at all ages a death-rate of 9·01 per thousand is taking place from preventable disease out of a total mortality from all causes of 16·00 per thousand, while among the Coloured population the death

rate from preventable disease is no less than 35·80 out of a total mortality of 46·25 per thousand.

The chief groups of preventable disease consist of Tuberculosis, Bronchitis and Pneumonia, which among Europeans accounted for a rate of 3·35 and among Coloured of 19·02 per thousand ; and of Typhoid Fever, Diarrhoea, Dysentry and Enteritis, which collectively caused a death rate of 3·70 per thousand in Europeans, and of 9·63 in Coloured. Together these groups of diseases were responsible for 44 per cent. of the total European deaths, and 63 per cent. of the Coloured.

#### *Comparison with the United Kingdom.*

It is of interest to compare these rates with the corresponding rates recorded in the United Kingdom ; owing, however, to some differences in the grouping of diseases in England and the Colony, it is not possible to institute a perfectly exact comparison, but any such differences are in favour of the Colony, inasmuch as in the English records the group of " Diseases of the Digestive System " which has to be taken, includes not only Enteritis and Gastro-Enteritis, but also sore throat, quinsy, teething and a large group of diseases of the liver, none of which are included in the rates above given for this Colony.

During the decennial period 1881-90, the annual mortality in the United Kingdom from Tuberculosis, Pneumonia and Bronchitis amounted to 5·63 per thousand, and that from Enteric, Continued and ill-defined Fever, Diarrhoea and diseases of the digestive system, to 2·00 per thousand, or a total of 7·63 per thousand as against 7·05 per thousand for Europeans in this Colony. The deaths, however, from these causes constitute only 40 per cent. of the whole mortality in England, as compared with a proportion of 44 per cent. in this Colony. Thus the mortality among Europeans in Colonial Towns is greater than in England from diarrhoeal diseases, but less than in England from chest complaints. These figures, however, must not be taken as constituting an absolute comparison, inasmuch as no correction is made for differences of age and sex composition between the population of our Thirty-five Chief Towns and that of the United Kingdom. If such a correction were made it would probably alter the relative positions and demonstrate that the mortality from chest complaints among Europeans in this Colony is also comparatively greater instead of less than in England.

But in any comparison of this kind the generally more favourable conditions of life which are attainable in this country as compared with England must never be lost sight of. The better climate, the more open life, the easier conditions of existence and the absence generally of *inevitable* poverty, overcrowding and toil, are all in favour of the Colony.

#### *Analysis of the Preventable Mortality.*

That a very great portion of the death-rate in our towns is due to preventable disease is further evident from a consideration of the causes of death given in the returns in the Annexure " A " to this report, and which are condensed in the subjoined Table 7, displaying, separately for the European and Coloured populations of each of the Thirty-five Chief Towns, the portion of the death-rate which may be taken to be directly due to preventable disease and the portion due to all other classes of disease. It may be added that many of these last are also largely influenced by prevailing



insanitary and unhealthy conditions. In the term "preventable disease" have been included all mortality from zymotic diseases and parasites, mortality from Bronchitis and Pneumonia, from Enteritis and Diarrhoea, and from the undefined causes, Dentition, Convulsions and Debility :—

TABLE 7.—Showing for each of the Thirty-five Chief Towns of the Colony the rates of mortality per 1,000 of the European and Coloured Populations, respectively, from preventable disease during the year 1903.

NAME OF TOWN.	Estimated Population.			Mortality per 1,000 of the Population.					
				From preventable Disease.		From all other causes.		Total mortality from all causes.	
	E.	C.	Total.	E.	C.	E.	C.	E.	C.
Cape Town ...	42,812	32,970	75,782	7·05	28·32	7·62	11·26	14·67	39·58
Suburban Municipalities i.e. Woodstock, Mowbray, Claremont, Wynberg, Maitland and Rondebosch ...	48,246	29,193	77,439	9·78	35·87	6·72	10·51	16·50	46·38
Green Point & Sea Point	6,958	1,319	8,277	4·03	5·31	6·03	8·34	10·06	13·65
Simonstown & Kalk Bay-Muizenberg ...	6,631	3,199	9,830	4·96	23·77	5·45	14·37	10·41	38·14
Kimberley ...	13,473	20,469	33,942	8·82	34·49	7·29	9·23	16·11	43·72
Beaconsfield ...	2,868	6,554	9,422	8·02	61·04	7·67	10·37	15·69	71·41
Port Elizabeth ...	21,352	10,962	32,314	8·85	46·69	6·93	12·15	15·78	58·84
East London ...	13,751	9,638	23,389	7·34	18·26	5·68	7·16	13·02	25·42
Grahamstown ...	7,127	6,434	13,561	8·98	40·40	8·14	11·20	17·12	51·60
Uitenhage ...	6,396	5,226	11,622	7·51	44·96	5·00	8·24	12·51	53·20
Paarl ...	4,898	6,143	11,041	10·20	29·95	8·38	14·49	18·58	44·44
Graaff-Reinet ...	3,971	5,803	9,774	11·09	32·57	6·54	8·62	17·63	41·19
King William's Town ...	5,832	3,521	9,353	9·77	23·85	6·18	5·40	15·95	29·25
Queenstown ...	4,005	5,139	9,144	13·49	50·39	7·48	9·15	20·97	59·54
Oudtshoorn ...	3,995	4,502	8,497	15·01	58·19	6·27	9·78	21·28	67·97
Worcester ...	3,477	4,234	7,711	7·49	40·39	6·32	13·46	13·81	53·85
Cradoek ...	2,956	4,555	7,511	19·28	49·18	9·81	7·68	29·09	56·86
Beaufort West ...	2,140	3,127	5,267	23·36	57·56	8·42	20·47	31·78	78·03
Aliwal North ...	1,697	3,546	5,243	14·15	27·08	8·83	11·56	22·98	38·64
Somerset East ...	1,792	3,250	5,042	10·61	25·23	8·92	10·77	19·53	36·00
Stellenbosch ...	2,401	2,455	4,856	5·42	42·36	7·91	18·33	13·33	60·69
Wellington ...	2,328	2,397	4,725	8·16	25·88	6·87	7·08	15·03	32·96
Mossel Bay ...	1,600	2,435	4,035	14·38	39·43	6·87	4·51	21·25	43·94
Malmesbury ...	1,902	1,813	3,715	13·14	35·86	6·84	10·47	19·98	46·33
George ...	1,796	1,634	3,430	10·57	37·33	6·13	6·12	16·70	43·45
Robertson ...	1,995	1,175	3,170	9·52	33·20	7·52	11·91	17·04	45·11
Burghersdorp ...	1,250	1,566	2,816	16·80	47·26	7·20	10·85	24·00	58·11
Swellendam ...	1,111	1,249	2,360	7·20	17·60	6·30	8·02	13·50	25·62
Prince Albert ...	1,006	749	1,755	14·91	34·72	11·93	2·66	26·84	37·38
Total ...	219,766	185,257	405,023	9·01	35·80	6·99	10·45	16·00	46·25

From this Table it will be seen that in the case of Europeans, after deducting the mortality due to preventable disease, a fairly steady rate of mortality from all other diseases occurs in the different towns, ranging from an annual death-rate of 5·00 per thousand in the case of Uitenhage to 11·93 per thousand in Prince Albert, the majority of the death-rates, however, ranging between the very narrow limits of 6 to 8 per thousand. Thus, in twelve towns it is between 6 and 7 per thousand, in seven, between 7 and 8 per thousand, and in five, between 8 and 9 per thousand, while in only three cases is it below 6, and in only two is it above 9 per thousand. On the other hand, the rate for preventable disease among Europeans varies, like the local health conditions, to a very wide extent, from 4·03 per thousand in the case of Green and Sea Point to 23·36 in the case of Beaufort West.



*Preventable Mortality among Coloured Population.*

But the effect of preventable disease in raising the death-rate is even more marked in the case of the Coloured population. Here again the mortality from non-preventable disease is fairly constant, although somewhat higher and more variable than among the European population, ranging in the majority of cases between 7 and 12 per thousand. But it is really the preventable disease that raises the Coloured death-rate so far above that of the European. It varies in accordance with the relative health conditions of the different towns, namely, from 5·31 per thousand at Green and Sea Point to 61·04 at Beaconsfield and 58·19 at Oudtshoorn, but only in five towns does it drop below 25 per thousand, while on the other hand in eleven towns it is over 40 per thousand.

It is clear that this enormous amount of preventable mortality would speedily result in the extinction of the Native and Coloured population in the Urban areas of the Colony, were it not for the large annual birth-rate by which it is replenished, and, indeed, in the case of many of these towns the births by themselves would not be sufficient to repair the ravages caused by death, were they not reinforced by constant immigration from the rural areas. In many towns the death rate far exceeds the birth-rate; as, for example, in Beaconsfield, where the death-rate is 71·41 per thousand and the birth-rate only 27·46 per thousand, in Kimberley with a death-rate of 43·72 and a birth-rate of 19·15, in Beaufort West with a death-rate of 78·03 and a birth-rate of 48·61, and in Burghersdorp with a death-rate of 58·11 and a birth-rate of 40·23 per thousand of the Coloured population. And even taking the Coloured population of all these towns as a whole, the birth-rate of 46·99 per thousand only just covers the death-rate of 46·25 per thousand.

The importance of this condition of things cannot be over-rated, and I think it should receive the prompt consideration of Local Authorities and the public, in order that some organised attempt be made to ameliorate the conditions under which this portion of the population lives. The fact must not be lost sight of that this mortality is only an indication of what is taking place in the shape of sickness, suffering, impaired vitality, vice and the loss to the State of a healthy labouring population.

*The spread of Tuberculosis.*

One of the most important of the preventable diseases is Tuberculosis, which bids fair in the future to become a severe and widespread scourge of the Native Races; indeed, in the case of the more civilised portion of the Native Races and among Coloured persons or Half Castes, it may be considered to have already attained that position.

In the accompanying Table 8, I furnish the mortality from Tuberculosis which occurred among the inhabitants at all ages in each of the chief towns of the Colony during the year 1903, together with a comparison of the rate of mortality from the same disease that occurred during the year 1896—the earliest year for which such records are available.

TABLE 8.—Giving for each of the Thirty-five Chief Towns the rates of mortality from Tubercular disease per thousand of the European and Coloured populations during the years 1903 and 1896, together with the mortality from Pneumonia and Bronchitis during the first-mentioned year.

Mortality per 1,000 of the Population at all ages.							
NAME OF TOWN.	Tuberculosis, 1903.		Tuberculosis, 1896.		Bronchitis and Pneumonia, 1903.		
	Euro- pean.	Coloured.	Euro- pean.	Coloured.	Euro- pean.	Coloured.	
Cape Town... ..	1.56	8.52	2.65	5.60	1.68	8.79	
Suburban Municipalities ...	1.80	8.91	1.47	4.99	1.64	9.53	
Green and Sea Point ...	0.57	3.03	0.74	0.00	0.86	1.52	
Kalk Bay--Muizenberg and Simonstown ... ..	1.06	5.63	0.86	2.21	1.05	6.26	
Kimberley ... ..	2.30	7.52	1.50	4.49	0.96	14.90	
Beaconsfield ... ..	0.70	8.70	0.92	6.06	3.14	23.04	
Port Elizabeth ... ..	1.55	15.14	1.70	12.43	0.93	9.39	
East London ... ..	0.87	3.42	1.09	1.71	1.31	6.85	
Grahamstown ... ..	1.26	8.39	2.26	3.43	1.40	9.17	
Uitenhage .. ...	0.47	12.63	0.78	13.75	2.19	13.58	
Paarl ... ..	0.82	5.86	1.49	3.16	1.22	8.30	
Graaff-Reinet ... ..	0.76	6.55	2.37	6.46	2.27	10.00	
King William's Town ...	1.89	2.56	1.17	4.87	1.55	6.24	
Queenstown ... ..	3.75	3.31	2.33	1.69	1.75	15.37	
Oudtshoorn ... ..	3.50	9.55	2.80	7.03	2.75	16.88	
Worcester ... ..	0.86	9.21	2.53	5.13	0.87	8.74	
Craddock ... ..	3.38	5.27	6.24	1.06	5.41	20.64	
Beaufort West ... ..	8.88	18.55	7.86	8.72	4.20	14.71	
Aliwal North ... ..	2.95	3.10	6.21	1.53	2.36	7.33	
Somerset East ... ..	1.12	4.92	0.00	2.98	5.58	10.77	
Stellenbosch ... ..	0.00	4.89	3.48	4.05	0.84	13.85	
Wellington... ..	0.43	7.09	*...	*...	0.86	8.35	
Mossel Bay ... ..	3.13	6.98	3.12	7.01	3.13	6.16	
Malmesbury ... ..	1.58	7.17	0.81	1.36	6.83	10.48	
George ... ..	1.67	12.85	*...	*...	3.34	11.63	
Robertson ... ..	2.01	8.51	0.59	5.36	1.50	10.22	
Burghersdorp ... ..	0.80	9.58	*...	*...	7.20	14.69	
Swellendam ... ..	0.00	2.40	0.00	2.06	0.90	2.40	
Prince Albert ... ..	1.99	9.35	5.19	7.54	2.98	16.02	
Total Combined Chief Towns .. ...	1.64	8.09	1.98	5.58	1.71	10.93	

\* Records for 1896 not available.

It is probable that the numbers given in the above Table, large as they are, do not include all the deaths that occurred from Tubercular disease, many of the uncertified cases of the disease being registered as due either to some form of chest complaint or to diarrhoeal disease, according as death has occurred from the pulmonary or the intestinal form of the disease. In order to show the extent of the coincident mortality from Pneumonia and Bronchitis, the death rates from these are given in a separate column in the above table.



*Mortality from Tubercle among Europeans.*

It will be seen that in 1903 the Tubercular death rate among Europeans of all the towns combined, amounted to 1·64 per thousand of the population, as against 1·98 per thousand in 1896, and of Coloured persons to 8·09 per thousand in 1903 as against 5·58 per thousand in 1896.

The rate of mortality among Europeans of these towns combined, compares favourably with that obtaining in the United Kingdom; the death rate in England and Wales during the decennium, 1881–1890, having been 2·42 per thousand, since when the mortality has steadily decreased, having been in the year 1901 only 1·81 per thousand of the population at all ages.

But the average mortality of all the towns combined cannot be taken as a correct indication of the actual state of things, inasmuch as the extent of the mortality varies greatly in the different towns, as, indeed, might be expected to be the case when the comparatively modern origin of the disease in this Colony is remembered, and the wide variation in geographic position and in climatic and social conditions of the different towns is taken into account. We must, therefore, in considering this question deal with the position of the towns individually.

Dealing, then, first with the European mortality, we find that, while in the majority of the towns the mortality is comparatively slight, and is less than that occurring in the United Kingdom, there are a number of towns in which the occurrence of the disease is considerably greater than in England; such as Queenstown, with a mortality of 3·75 per thousand; Oudtshoorn, 3·50; Cradock, 3·38; Beaufort West, 8·88; and Mossel Bay, 3·13. It is a noticeable fact that, with the exception of Mossel Bay, all are places of high altitude and have been largely used as health resorts by persons suffering from the disease. In most instances, as in Queenstown, Oudtshoorn, and Beaufort West, these rates are greater than those which obtained in the year 1896, but in others the rate has fallen somewhat since that date.

Distinguishing the towns in which the mortality among Europeans from Tuberculosis has respectively increased or diminished, we find that the mortality has diminished in Cape Town, Beaconsfield, Port Elizabeth, East London, Grahamstown, Uitenhage, Paarl, Graaff-Reinet, Worcester, Cradock, Aliwal North, Stellenbosch and Prince Albert, while it has increased in the case of Kalk Bay and Simon's Town, The Cape Suburban Municipalities, Kimberley, King William's Town, Queenstown, Oudtshoorn, Beaufort West, Malmesbury and Robertson; in Mossel Bay it has practically remained stationary, and in the remaining towns no records are available for the year 1896.

On the whole, therefore, the position as regards Tuberculosis of the European population of the chief towns of the Colony may be taken to have improved in the year 1903 as compared with the year 1896. It is doubtful, however, how far this improvement may not be due to the restricted immigration of Phthisical persons to the Colony during the South African War and the years immediately succeeding it. But whether improvement has or has not occurred, the extent to which the disease prevails among Europeans is greater than should be the case under the favourable climatic and social conditions of South Africa, and is sufficient to demand the taking of all possible means for its arrest.



*Mortality from Tubercle among the Coloured Population.*

But it is when we turn to the Coloured population that we see how ominous is the state of things. Here we find that not only has the total mortality, taking all the towns together, enormously increased, namely, from 5·58 per thousand to 8·09 per thousand, but that this increase is practically general throughout all the towns ; in fact, there are only two in which any decrease is shown, these being Uitenhage, which has decreased from 13·75 to 12·63 per thousand, and King William's Town, which has decreased from 4·87 to 2·56, while Mossel Bay has remained practically stationary, being 6·98 in 1903 as against 7·01 in 1896. In all others it has increased, and in some the increase has been enormous, as in the case of Cape Town, where it has risen from 5·60 to 8·52 ; in the Cape Suburban Municipalities from 4·99 to 8·91 ; in Kalk Bay and Simon's Town from 2·21 to 5·63 ; in Kimberley from 4·49 to 7·52 ; in Grahamstown from 3·43 to 8·39 ; in Oudtshoorn from 7·03 to 9·55 ; in Worcester from 5·13 to 9·21 ; in Cradock from 1·06 to 5·27 ; in Malmesbury from 1·36 to 7·17 ; in Robertson from 5·36 to 8·51 ; and in Beaufort West from 8·72 to the astounding mortality of 18·55 per thousand.

The alarming condition of things displayed by these figures is amply borne out in other directions. On all sides there is evidence that Tuberculosis is rapidly becoming one of the most, if not the most, decimating disease of the Native and Half Caste Races, while its power of increase in the future is, unless prompt and effective measures are taken to arrest it, probably illimitable.

*Tubercular Mortality in Convict Stations and Prisons.*

In the administration of the Colonial Convict Stations and Prisons, to which I have for long been Medical Adviser, I have been struck with and have had for years past to report on the prevalence of Phthisis among our Convicts and Prisoners. Owing to the extent to which this disease occurs among the inmates of our Penal Establishments, efforts have been made to prevent overcrowding of the cells and dormitories as far as the existing—often miserable—accommodation will admit of, and to this end, on my recommendation, an increased standard of four feet from centre to centre of the bed boards in lieu of the three feet originally fixed, was adopted about the year 1899, although I regret to say that it has not always been possible to act upon it. This alteration may have slightly reduced the number of cases of the disease reported by the different Medical Officers as having been contracted subsequently to incarceration, but no very great effect has resulted.

As will be seen from the following Table 9, which gives for each year, from the 1st January, 1895, to the 30th June, 1904, the total number of deaths from Tuberculosis and the annual rate of mortality per thousand of annual units of the Penal population, the mortality, which in 1895 was only 2·6 per thousand, gradually rose to 11·1 per thousand in 1899 ; thence it fell to 5·5 in 1902, rising again to 7·8 in 1904. In these figures it has not been possible from the records to distinguish between European and Coloured prisoners, but the latter constitute the bulk of the penal population ;—



TABLE 9.—Showing for each year from the 1st January, 1895, to the end of the first half of the year 1904, the total number of Deaths from Tuberculosis in Convict Stations and Prisons, with the annual rate of mortality per 1,000 of annual units of their penal population, European and Coloured, and the number of Deaths from the Disease medically reported to have been acquired after incarceration, with their percentage proportion.

YEAR.	Number of Deaths.	Proportion per 1,000 of Annual Units.	Disease reported to have been acquired after incarceration.	Percentage proportion acquired after incarceration.
1895 ... ..	14	2·6	...	...
1896 ... ..	25	4·2	2	8·0
1897 ... ..	48	7·9	15	31·2
1898 ... ..	62	9·8	17	27·2
1899 ... ..	75	11·1	20	26·6
1900 ... ..	43	6·4	13	30·2
1901 ... ..	39	6·1	12	30·7
1902 ... ..	30	5·5	2	6·6
1903 ... ..	36	6·8	7	19·4
1st Half-Year 1904	22	7·8	5	22·7
1895-1904 ...	394	6·9	93	23·60

*Other evidence of increasing prevalence.*

Apart, however, from statistics, there is an extending opinion among those competent to judge, that Phthisis is obtaining an increasing hold of the Native races. The South African Native Affairs Commission, 1903-05, has stated in its recent report that Consumption and diseases of the lungs are markedly on the increase among the Native Races, a circumstance which it attributes to the more general adoption by them of European clothing.

Also, throughout the reports of the District Surgeons for the Half-year 1904, which are printed at the end of this volume, will be found numerous references to the spread of the disease; references which are the more important because spontaneous and unasked for. Doubtless many more would have referred to the matter had they been specifically asked for information on the subject.

Thus, in Malmesbury, the District Surgeon states that Tuberculosis appears to be on the increase in the district, and he believes that it is really greater than is shown, as judging from the number of deaths stated to have occurred from Pneumonia, he suspects, and in many cases he has proved, that this was merely an intercurrent complication of Consumption.

Again, the Medical Officer to the New Brighton Location, Port Elizabeth, states that Phthisis continues to attack the Natives at the Location with much severity.

Also the District Surgeon of Prince Albert reports that the disease is on the increase.

At Stutterheim the District Surgeon states that Phthisis "accounts for the greater number of deaths among Natives. A good deal of this occurs among the civilized Natives. This may be due to change of food combined with immorality and inebriety, but the change from the blanket to the semi-European clothing appears to me to greatly forward the disease, especially in rainy weather



when a change of clothing is not available. I am informed by the Rev. Dr. Bester, who has had about forty years' experience, that Phthisis amongst the 'raw Kafir' was almost unknown about twenty-five years ago."

At Butterworth, again, the District Surgeon reports that "as in former years, there is still a steady increase in the number of sufferers from Tuberculosis, pulmonary and otherwise. Measures to check the spread of this disease, and to introduce some knowledge of the elementary laws of hygiene, are urgently required."

Again, the Medical Officer of Health to the Municipality of Ceres reports that the disease is on the increase, the infection being undoubtedly largely carried there by victims from abroad in previous years.

And the Medical Officer to the Municipality of Hanover in his report states that the large and increasing number of Tubercular cases, especially among the Coloured people, is a matter of much concern and will require constant supervision of their dwellings to prevent overcrowding.

At Fort Beaufort, again, the District Surgeon, Dr. W. Duncan Miller, draws serious attention to the disease and its causes. He says:—

"The fact that tubercular diseases, and particularly Pulmonary Tuberculosis, are on the increase, especially among the natives, calls for very serious consideration, inasmuch as this constitutes a growing danger to the public health of Europeans and natives alike. The compulsory notification of these cases is undoubtedly a step in the right direction, but until Local Authorities waken up to a sense of their responsibilities in regard to the public health in this matter, very little can be done towards checking the ravages of this scourge of the human race. The constant overcrowding and lack of ventilation of the native huts are responsible for much of the increase in Phthisis cases which has of late been painfully impressing itself upon the attention of medical practitioners in this district. More careful supervision of native locations, education of both European and native public opinion on the principles of the prevention of tubercular diseases, and some attempt at isolation of Phthisis cases, when notified, are matters which must sooner or later be taken up and dealt with by Local Authorities."

And in the same strain the District Surgeon of Port Nolloth writes "There is no order, cleanliness or general sanitation in the Native Location, where Pulmonary Phthisis prevails to an enormous extent, owing to ill-clothing, ill-housing, poverty and vice, especially alcoholism."

#### *Causes of the Spread.*

As to the cause of this widespread increase of Tuberculosis, it is difficult to indicate any one condition which is the chief responsible factor, and the removal of which would arrest its further spread. Of course, the essential cause of the disease is the invasion of the body by the Tubercle bacillus, but this knowledge is of little use unless we can indicate the particular conditions responsible for its extraordinarily rapid dissemination among the Native Races.

Although alcoholism, the adoption of European clothing and the changed conditions of life accompanying civilization are doubtless factors in the causation of Tuberculosis, these are merely contributory causes, and cannot in themselves produce the disease.

There are, however, two factors which I believe to be more largely than others responsible for its spread. One of these is an inherent predisposition to the disease, or, rather, a constitutional incapacity to resist its invasion displayed by the Coloured Races and especially by Half Castes. When it is remembered that the



appearance of Tuberculosis in most parts of the Colony is of comparatively recent date, the rapid strides it has since made among the Native Races would point to the existence of an unusual susceptibility among these Races to the disease. That such is the case is borne out by the extraordinary rapidity with which many such patients succumb on being attacked. In our Gaols it is no uncommon thing for a prisoner to die within two or three months, and sometimes within a few weeks after the first onset from acute miliary Tuberculosis, or, as the public would term it, "Gallop Consumption." In many such cases the exact duration of the disease has been verified by reference to the Medical Officer who has confirmed the date of onset by his having medically examined the prisoner before he developed the disease.

In further support of the view of a constitutional predisposition to attack by and succumb to the disease, I may allude to corresponding differences in the Coloured Races, as compared with Europeans, in the matter of certain other infectious complaints; thus, for example, Small-pox is notoriously mild and non-fatal in its effects among Natives, so much so that it is one of the constant difficulties of the Health Department to get Medical Men and the Public to believe in such outbreaks actually being true Small-pox. Scarlatina, again, is a disease which affects the Native lightly, and so also is Syphilis, in spite of its wide prevalence\* and the absence of treatment. On the other hand, Measles, a complaint which is thought little of in European countries, is a disease of extreme virulence among the Native Races. I have known an epidemic of it pass through the Native Territories killing the children off like flies.

Against such constitutional weakness, it is difficult to fight in the face of any widespread diffusion of the germs of the disease, except in so far as we may remove predisposing causes, such as alcoholism, improper living, and the like.

The second of the chief factors is one leading to the spread of the disease by diffusion of infection, and consists in the conditions under which the people herd together in unhealthy abodes. The dark, ill-ventilated, mud-floored, wattle-and-daub hut of the Native living under natural conditions in his native kraal is well calculated to assist the diffusion of the organism, and this is aided by the Native's habit of constant expectoration about the floor. Their effect is, however, to a certain extent restrained by the raw Native's natural habits of personal cleanliness, and by the disinfecting effect of the acrid smoke with which the hut is filled by the open fire of twigs almost constantly burning in the centre of the floor.

But it is in the Urban centres that the conditions of Native life are at their worst. Here, with their adoption of European clothing, they discard personal cleanliness, and with their preference for overcrowding and their keen dislike of ventilation both fostered by force of circumstances, they herd together, men, women, and children, married and single, in dirty, insanitary, unlighted, unventilated and ill-constructed habitations.

Much improvement in this direction with a consequent diminution of the spread of the disease could undoubtedly be effected by the exercise of an enlightened and firm control by Local Bodies over the dwelling places of the Native and Coloured populations

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\* In Bechuanaland 70 to 80 per cent. of the native population is reported to be affected by this disease.



within their areas, so as to ensure that all habitations shall be hygienically constructed and properly used, that they are kept clean, are not overcrowded, and are furnished with a sufficient supply of good water, an element which at present is usually lacking.

But when all is said and done, these measures cannot by themselves be expected to successfully combat the spread of the disease: this can only be accomplished by the diffusion among the public of a true knowledge of its infectiousness and of the manner of its spread, of the value of personal and domestic hygiene, and of the necessity of individual initiative, without which public endeavour must always remain ineffectual.

It is not enough that the sick should be taught to take precautions, but the healthy must insist on them being taken and must shun everything likely to engender the disease.

It is, however, difficult enough to bring this knowledge home to educated Europeans: it is a task well nigh hopeless to instil it into the Native mind. Nevertheless, I believe that much may be effected by the judicious instruction of the higher Native Races, and especially those who have not yet become debased by life in the Urban centres. Such Natives have shown themselves quick to appreciate and adopt definite and visible means of protection from disease offered to them by the Government, as, for example, that of vaccination against Small-pox, and it should be possible in time to make them understand the value of less direct measures.

In the education of the public to the magnitude of the danger with which it is fronted, the efforts of *The Association for the Prevention of Consumption in the Colony* and its founder Dr. B. J. Guillemard, deserve the highest praise and should receive the support of every responsible member of the public. But the diffusion of knowledge should not be left entirely to such efforts. Every Local Authority should take the matter up and instruct the poorer sections of the community in general measures of hygiene and the means of combatting the disease. By the compulsory notification of Tuberculosis, which the Government introduced in 1903, the Local Authority has been provided with the means of dealing with households in which cases of the disease occur, but I regret that, with few exceptions, little advantage has been taken of these powers.

Also public notices and regulations prohibiting expectoration in public places cannot fail to have a valuable educative effect upon public opinion, although from the deterrent or punitive point of view they are almost useless. It is chiefly in connection with the use of railway carriages, public conveyances and public buildings that rules of this kind are likely to be of most effect.

Much good would also result, not only in regard to this disease, but to the cause of Public Health generally, if some elementary instruction on the Laws of Health were given as a recognised part of the Educational Course in our Schools.

There are also other directions in which benefit would result from public action, and among these is the important matter of dealing with imported cases of Phthisis. At the present time there is a constant flow to South Africa of Phthisical persons, who, coming in the hope of obtaining a cure for themselves, spread the disease to others broadcast through the country. Such cases should not be allowed entrance unless adequate safeguards, to the satisfaction of the Authorities, are forthcoming that the admission



of the patient will not result in danger to the Public Health ; but to effect this it is necessary that the Government should be clothed with additional statutory powers ; such, for example, as have been provided for in the Draft Public Health Bill.

It is a significant fact that centres in the Colony, such as Beaufort West, which we formerly knew to be free from the disease and which, owing to their peculiarly favourable climatic conditions, have been chosen as health resorts by immigrant consumptives, should, at the present day, be the most severely afflicted by the disease, its incidence falling not only on the Native but also on the European portion of the population.

It is, furthermore, essential that means should be provided for the care and isolation of advanced cases of Phthisis who are living among the community under conditions rendering it impossible to prevent the spread of the disease.

I cannot close this portion of my report without giving expression to the fervent hope that the public at large will take the matter up while it is yet possible to apply in the Colony some effective checks to the spread of this terrible disease.

### *Typhoid Fever.*

Next in importance of the preventable diseases attacking young adult life in this Colony is Enteric Fever.

The exact extent to which this disease prevails it is impossible to state statistically, as many more cases occur than are ever reported or known of, especially among the Coloured population. A large portion of the recorded mortality in young adults from Enteritis and Diarrhoeal disease and from so-called "Fever," is undoubtedly due to Enteric Fever. Even in the case of medically certified deaths it has been found that the cause of death assigned is not always to be relied upon, owing to some medical men holding special views concerning the disease. It has thus on occasions happened that numbers of undoubted cases of Typhoid have in places been certified to under such names as Malaria and Typho-Malaria.

Incomplete, however, as are our statistics, we know enough to rank it as one of the grave risks to the health of adults to be encountered in this Colony.

During the year 1903, 293 deaths from this disease were registered in the thirty-five chief towns, of which 208 occurred between the ages of 15 and 45 years. The rate of mortality during the year amounted to 0·56 per thousand of the European population and to 0·92 per thousand of the Coloured. The annual mortality in England and Wales during the decennium 1888-97 was only 0·17 per thousand of the population.

Like the other preventable diseases, the extent of its prevalence varies in the different towns, being in some slight, or, if the statistics are to be trusted, even entirely absent, while in others it is very rife, the mortality caused by it reaching, even with our incomplete records, to 5·52 per thousand of the Coloured population. These facts are set out in the subjoined Table 10, which displays the rate of mortality due to the disease during the year 1903 in each of the chief towns, together with the rates due to the allied causes, Diarrhoea and Enteritis.



TABLE 10.—Showing the Rate of Mortality due to Enteric Fever during the year 1903, for each of the Thirty-five Chief Towns; together with the Rates of Mortality from Diarrhœa and Enteritis for the same period.

Name of Town.		Mortality per 1,000 of the Population at all Ages.					
		Typhoid Fever.		Diarrhœa.		Enteritis.	
		E.	C.	E.	C.	E.	C.
Cape Town ...	...	0·35	0·30	0·51	1·67	1·38	3·88
Suburban Municipalities ...	...	0·79	1·37	1·55	3·73	2·11	6·17
Green and Sea Point ...	...	0·43	—	0·57	0·76	1·01	—
Kalk Bay, Muizenberg and Simonstown ...	...	0·30	0·63	0·90	1·88	0·90	3·75
Kimberley ...	...	0·59	0·64	0·82	4·93	2·08	3·57
Beaconsfield ...	...	—	0·76	—	18·46	2·79	3·05
Port Elizabeth ...	...	0·56	1·09	1·17	3·38	2·06	5·02
East London ...	...	0·51	1·56	0·58	1·45	3·05	3·32
Grahamstown ...	...	0·28	0·31	0·70	6·53	2·81	4·66
Uitenhage ...	...	0·16	1·15	0·94	3·64	2·03	4·02
Paarl ...	...	0·41	0·98	1·63	1·95	2·45	3·74
Graaff-Reinet ...	...	0·76	0·52	2·27	4·48	3·53	6·20
King William's Town ...	...	1·03	0·57	1·03	3·69	2·91	3·12
Queenstown ...	...	1·00	0·97	0·25	10·31	3·25	3·89
Oudtshoorn ...	...	—	0·67	3·25	8·00	1·25	2·22
Worcester ...	...	0·86	0·94	1·15	4·72	2·30	5·20
Craddock ...	...	0·34	1·54	0·34	9·00	5·75	3·07
Beaufort West ...	...	1·87	0·32	0·47	7·68	4·21	8·63
Aliwal North ...	...	—	1·97	2·36	4·79	3·54	6·77
Somerset East ...	...	—	—	1·67	1·85	1·12	2·15
Stellenbosch ...	...	—	0·41	0·42	6·11	1·25	6·92
Wellington ...	...	0·43	0·42	2·15	2·50	1·29	3·34
Mossel Bay ...	...	1·25	4·11	2·50	3·70	3·75	4·11
Malmesbury ...	...	1·05	5·52	1·05	4·41	1·05	2·21
George ...	...	—	—	—	—	1·11	—
Robertson ...	...	0·50	—	0·50	4·26	1·50	5·11
Burghersdorp ...	...	3·20	3·19	2·40	8·30	3·20	3·19
Swellendam ...	...	—	—	0·90	1·60	1·80	5·60
Prince Albert ...	...	0·99	1·34	1·99	—	1·99	—
Total combined Chief Towns		0·56	0·92	1·05	4·38	2·09	4·33

The actual deaths, however, constitute but a small part of the loss and suffering entailed upon the community by this complaint. We shall probably be well within the mark if we estimate that at least 5,000 cases of the disease occurred in these urban areas during the year.

As illustrating the extent to which the disease prevails in places, I may mention that, in the case of some outbreaks recently investigated and reported upon by Medical Officers of this Department, such an extraordinary percentage of attacks to the population as the following were discovered:—Thus, at French Hock, a village which, according to the recent Census, contained a population of only 1,305 persons, of whom 642 were Europeans and 663 were Coloured, no less than 61 cases of the disease (37 Europeans, 24

Coloured) were medically reported in the course of four months. And again, in the Municipality of Riversdale, with a population of 2,643 persons, of whom 1,136 were Europeans and 1,507 Coloured, an outbreak occurred, during the course of which 129 cases of the disease were reported upon by the Medical Officer, very many more cases being undoubtedly overlooked. That is, in both these cases, one out of every twenty-one persons of the population were in a short time attacked.

I have in previous reports dealt with the causes of the great prevalence of this disease, and I do not therefore propose to now enter into them again. No diminution in the prevalence of the disease can be expected to occur until local authorities generally are prepared to provide the inhabitants of the areas under their jurisdiction with properly protected supplies of pure water and to take adequate means for the collection, removal and disposal of night-soil. But this is not likely to happen until the public itself recognises the necessity of these measures and are prepared to pay for them. Unfortunately, however, the ratepayers of most of our up-country towns are not willing to be rated for purposes which each individual seems to think he can manage better for himself.

#### *Small-pox.*

It has been already pointed out that Local Authorities, as a whole, pay but little heed and take few, if any, steps to combat the preventable diseases. Small-pox, however, is an exception to this rule, owing mainly to the fact that, under the provisions of "The Public Health Amendment Act, 1897," Government has to refund four-fifths of expenditure incurred by Local Authorities in the suppression of this disease. As a result of this the Government is enabled to exercise some slight but inadequate control over Local Authorities in this matter, and which the latter are the more inclined to submit to, inasmuch as but a small portion of the cost of so doing falls upon their own shoulders. This system is, however, a bad one and results in great extravagance and waste of Public Funds, which, in the course of years, has amounted to a formidable sum. It is most necessary that the continuance of this system of local authorities spending without responsibility, and of Government paying without control, be reconsidered, and the matter should therefore be included in any new Public Health Bill.

During the half-yearly period covered by this report, thirty-six separate outbreaks of Small-pox, involving nineteen districts and sub-districts, occurred in the Colony. In eleven of these outbreaks only one case of the disease took place. The largest outbreak occurred in the mainly Native District of Glen Grey, where 15 cases of the disease developed, all of the patients being Natives. Five cases occurred during the six months in the Cape Peninsula. Three outbreaks, with 11 cases, took place in the Namaqualand District, the infection having been introduced by refugees from German South West Africa, where the disease seems to have been prevalent for some time past. A case was also introduced into Colesberg by a Basuto from the Orange River Colony.

The total number of cases occurring in the Colony Proper during the half-year was 117, of whom 17 were Europeans. Of this total 81 cases were in unvaccinated persons, the remaining 36 cases being returned as pre-vaccinated. The disease was in all cases of a very mild type, the deaths amounting only to two, both being in Natives who were unvaccinated.



In the Native Territories, during the same period, 38 separate outbreaks were reported, 21 of which, however, occurred in one District, Umzimkulu, the total number of districts involved being only six. Several of the outbreaks in the Umzimkulu District appeared simultaneously, and about ten days or a fortnight after the return of a number of Natives from the kraal of a Chief on the Natal side of the River, where they had been to a "feast of the first fruits." Most of the other outbreaks which occurred in the Native Territories were more or less directly traceable to those in the Umzimkulu District. The total number of cases, all of whom were Natives, amounted to 144, only 30 of whom had been previously vaccinated: 5 deaths occurred, all in unvaccinated persons.

Detailed particulars of these outbreaks will be found in Annexure "B" to this Report.

#### *Public Vaccination.*

The limited extent to which Small-pox prevails in the Colony, in spite of the considerable number of outbreaks or foci of infection, is practically entirely due to the large amount of public vaccination which is carried out by the Government, upon whom rests the sole responsibility and expense of this public service.

In Annexure "B" attached hereto will be found detailed returns of the public vaccinations performed in the several Districts of the Colony and the Native Territories during the Half-year dealt with in this Report. From these it will be seen that, during the period mentioned, 17,742 persons were vaccinated in the Colony Proper, of whom 12,190 were primary or first vaccinations, and that 8,146 persons were vaccinated in the Native Territories, of whom 3,713 were primary. 11,964, or 67·4 per cent. of those vaccinated in the Colony, and 4,486 or 55·06 per cent., of those in the Native Territories were under the age of 10 years.

In the returns abovementioned, the results of the vaccinations are recorded as "successful" or "unsuccessful," most of them being placed in the former category. This classification cannot, however, be relied upon, as the figures upon which they are based are obtained by the Public Vaccinators mostly on hearsay evidence, second visits for inspection rarely being authorised by the Department, as the expense involved would practically double the cost of vaccination and exceed the funds provided by Parliament. There is no doubt, however, that the bulk of the vaccinations are successful, inasmuch as before the Vaccine Lymph obtained from any calf is issued its efficacy is carefully tested by vaccinations performed under the observation of the Bacteriological Assistant of this Office.

The powers under which public vaccination is administered are insufficient, especially in Urban areas, and provision should, in any future Public Health Act, be made for providing the Government with proper administrative machinery.

#### *Puerperal Fever.*

In previous reports I have drawn attention to the frequency of the occurrence of Puerperal Fever in the Colony, and to the need for preventive legislation on the subject. This disease is in every case directly due to infection attacking the lying-in woman, and is generally conveyed by the attendant at the time of, or shortly after, confinement. It is, therefore, in the most accurate sense an entirely



preventable disease, and one which is not only preventable but *easily* preventable by the exercise of the simplest precautions, and the Law should, therefore, be such as to ensure that these precautions are taken by those responsible, and should provide a heavy penalty for their wilful neglect.

In 1899, when the Bill, which became "The Medical and Pharmacy Amendment Act" of that year, was being drafted, I urged that there should be inserted provisions requiring all persons practising midwifery for profit to take such simple and necessary precautions in the exercise of their profession as should be prescribed by the Governor on the advice of the Colonial Medical Council, but the Government of the day declined to accede to this view, on the ground that they considered it would not be fair to expect the illiterate class of coloured women who act as midwives in this Colony, to make themselves acquainted with such rules, and the necessary clause was, in consequence, omitted.

During the year 1903, 24 deaths from Puerperal Fever were recorded in the chief towns of the Colony, 9 of which were of European and 15 of Coloured persons. The births during the same period amounted to 15,428, of which 6,722 were Europeans and 8,706 Coloured. These figures, therefore, give a rate of mortality per thousand of confinements of 1.33 for Europeans and 1.72 for Coloured, or, in other words, 1 in every 747 European women confined died of Puerperal Fever, and 1 in every 580 of Coloured women. It is certain, however, that these figures are incomplete, nor do they indicate the number who suffer severely but ultimately recover, although often with permanent loss of health.

Impressed with the importance of this subject, I have for long past caused all cases of Puerperal Fever notified to this office by medical men, to be investigated, with the view to ascertaining whether the midwife in attendance had been responsible for the conveyance of infection, and in many cases we have adopted the practice of having the midwife specially cautioned and her attention drawn to the danger incurred by her attending other confinements while still liable to carry the puerperal infection. These means, however, have no legal backing and are manifestly ineffective, as the following sequence of cases will shew :—

On the 3rd June, 1904, this office was notified that several cases of Puerperal Fever had occurred in the Wynberg Municipality in the practice of a certain midwife. The facts were at once investigated on the spot by a Medical Officer of this Department, when it was found that four cases of Puerperal Fever, with three deaths, had occurred within the Municipality during the months of April and May, the patients having been attended in their confinements by an old coloured woman, living in a small and dirty cottage, and practising as a midwife in the neighbourhood. She was grossly ignorant, very unclean in her person and clothing, and had no knowledge whatever of antiseptics or their use.

The first case of Fever was in a coloured woman, who was confined on the 7th April, and became seriously ill four days later. A doctor, who was then called in, pronounced the case one of Puerperal Fever, and she died two days later.

On the 17th May, the same midwife attended another coloured female in her confinement, and two days later the patient became ill, and a doctor was called in, who found her suffering from Puerperal Fever, from which she died eight days later.

On the 21st May, this midwife, while still nursing the last case, confined a European woman, who also within two days thereafter



became seriously ill. The doctor who was then summoned diagnosed Puerperal Fever, from which she died four days after.

Again, on the 22nd May, the same midwife attended the confinement of another coloured woman while, as before pointed out, in attendance upon the previous cases. This woman became ill, and ten days later was seen by a medical man who found her suffering from Puerperal Fever. She, however, was fortunate in making an ultimate recovery.

Careful enquiry showed that in none of these cases were any antiseptics used by the midwife, or, indeed, that she took the most ordinary measures of cleanliness, not even washing her hands before or during any of the confinements, and the ascertained facts made it certain that in every one of the cases the disease had originated through gross carelessness and the neglect of the simplest precautions on the part of the midwife.

This department, therefore, procured the necessary affidavits testifying to these facts, and the matter was brought to the notice of the Attorney-General, with the recommendation that criminal proceedings should be instituted against the midwife.

The Government Law Adviser, to whom the question was thereupon referred, was of opinion that the existing Common Law clearly rendered a midwife who communicated fatal Puerperal Fever through uncleanness or failure to take ordinary precautions, liable to be convicted of culpable homicide, and he recommended that an indictment on this charge should follow.

A preparatory examination was accordingly taken in the Court of the Resident Magistrate, Wynberg, and the midwife, who reserved her defence, was formally committed for trial. In the sequel, however, the Crown decided not to prosecute, on the ground that as the midwife's age was stated to be seventy-seven years, any sentence of punishment passed upon her would have to be at once remitted.

I say this was the sequel of the affair, but it was not the ending. for on the 24th September following, this midwife, who appears in the meantime to have been irresponsibly pursuing her profession, attended an off-coloured woman, who was a sister of the third fatal case abovementioned. Four days later this woman, like the others, became ill, and a medical man, who was at once called in, diagnosed Puerperal Fever. This case was also at once enquired into by this Office with the result that there was little doubt but that the disease had been communicated to the patient by the midwife. This case, after a protracted illness, was happy in recovering.

The Department brought this further case to the notice of the Attorney-General, with the result that the midwife was warned by the police that her conduct in the practice of midwifery would, in future, be closely watched, and should any of her patients show signs of neglect or carelessness resulting in injury or death, she would be prosecuted, and the full penalty of the law pressed for. Instructions were also issued to the police to keep themselves informed of the names and addresses of patients whom she in future attended. Thereupon this midwife appears to have become scared, for she informed the police that she had decided to discontinue further practice as a midwife.

That the above is no isolated experience is shown by the following cases :—

On the 25th June, 1904, a coloured, uncertified midwife attended a Coloured woman in her third confinement at Somerset Strand. The patient, two days later, on the 27th June, became ill, and a



Doctor was called in, who diagnosed Puerperal Fever, of which disease the patient died on the 1st of July.

On the 24th of June, this same midwife had also attended another Coloured person, a girl of 18 years, in her second confinement. This patient had progressed normally for four days until the 28th, or a day after the previously mentioned case had sickened. At this time she became ill, and a doctor was fetched on the 1st July, but she died of Puerperal Septicaemia the next day.

In this instance the Attorney-General prosecuted the midwife for culpable homicide before the Circuit Court of the District of the Paarl, but the accused was found not guilty.

Such, however, is bound to be the case until the Law lays down certain definite, though easy and simple, precautions which must be observed by persons practising Midwifery, and declares that the wilful neglect thereof shall be a criminal offence.

At the present time the Colonial Medical Council is empowered, under Section 27 of "The Medical and Pharmacy Act, 1891," to grant, on satisfactory proof of professional knowledge, Certificates of competency in Midwifery to Midwives, and upon this Certificate such persons are registered in a register kept in the Office of the Colonial Secretary. This Certificate empowers the holder to practice Midwifery according to regulations to be framed by the Council for observance by Medical Practitioners and Certified Midwives, for the purpose of preventing the spread of Puerperal Fever or any other similar disease.

Therefore, as matters at present stand, the properly educated, duly examined and officially certificated midwife is worse off than the ignorant and unqualified self-styled midwife, who is not amenable either to the Regulations or to the jurisdiction of the Medical Council, and so can practice Midwifery with impunity and irresponsibility.\*

In connection with this matter there is another point to which I should draw attention, and that is the large mortality that there is every reason to believe is taking place among newly born infants from *trismus neonatorum*, a disease which, like Puerperal Fever, is caused by an infection dependent upon uncleanness.

### *Plague.*

During the six months under review, Plague was not greatly in evidence, notwithstanding that the first half of the year is the period in which the disease has the greatest seasonal prevalence in South Africa.

In all, 32 cases of the disease were discovered, of which 4 were Europeans; of whom one died, and the remainder Native and Coloured persons, of whom 17 succumbed. 25 of these cases (3 Europeans and 22 Coloured) occurred at Port Elizabeth; 4 (all Coloured) at Uitenhage and 3 (1 European and 2 Coloured) at East London.

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\* Recognising the invidiousness of placing Medical Practitioners and Midwives under the operation of Regulations regarding the manner of the practice of their profession, while the unqualified Midwife is subject to no control whatever, the Council has hitherto hesitated to frame proper Regulations under Section 28 of "The Medical and Pharmacy Act, 1891." At present the only Regulations of the Council bearing on this matter which are in force are the following:—

- (1) No Certificated Midwife shall be allowed to administer any drugs or to use or apply any instrument, except those expressly ordered in Regulation 2.
- (2) Every Certificated Midwife shall be required to use antiseptics, and will be permitted to use the catheter and vaginal douche and ergot where specially indicated.
- (3) All Certificated Midwives shall be required to keep a simple register, embodying the name of the parent, sex of child, date of birth and result of accouchement to mother and child.



The four cases discovered at Uitenhage were due to the migration of a Native store-boy, who, finding himself ill with the disease, secretly left Port Elizabeth, where he was working, and returned to his home in the Kabah Location at Uitenhage, on the 13th of February, where he died on the 23rd of the same month. During his illness the patient was nursed by his mother, his two nieces, and his nephew. The nephew contracted the disease, and was in turn nursed by his sisters, both of whom shortly afterwards became infected. Fortunately the outbreak was discovered on the death of the first patient, and prompt measures were taken which prevented any further spread of the disease.

As in the past, rats were the cause of infection in nearly every case, and every outbreak, except that which occurred at Uitenhage, was accompanied by an epizootic of the disease among rodents in the infected area.

TABLE 11.—Showing the occurrence of Plague in the Colony during the Half-year ended on the 30th June, 1904.

Week Ended.	Port Elizabeth.					East London.				Knysna.*		Queens-town.*		Uitenhage.†		Grahams-town.*	
	No. of Cases.		No. of Infected Animals.			No. of Cases.		No. of Infected Animals.		No. of Infected Animals.		No. of Infected Animals.		No. of Cases.		No. of Infected Animals.	
	E.	C.	Rats.	Mice.	Cats.	E.	C.	Rats.	Mice.	Rats.	Mice.	Rats.	Mice.	E.	C.	Rats.	Mice.
2nd Jan.	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...
9th "	...	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...
16th "	...	2	1	...	...	...	...	4	2	...	...	...	...	...	...	...	...
23rd "	...	...	1	1	...	1	...	2	...	...	...	...	...	...	...	...	...
30th "	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
6th Feb.	...	...	3	...	...	...	...	...	1	...	...	...	...	...	...	...	...
13th "	...	...	2	6	...	...	...	...	...	...	...	...	...	...	...	...	...
20th "	...	...	7	104	...	...	...	3	1	...	...	...	...	...	...	...	...
27th "	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
5th March	...	8	30	29	1	...	...	1	1	...	...	...	...	...	...	...	...
12th "	...	3	8	30	...	...	...	...	6	...	...	...	...	...	4	...	...
19th "	...	1	18	5	...	...	...	...	2	...	...	...	...	...	...	...	...
26th "	...	...	25	1	...	...	...	...	1	...	...	...	...	...	...	...	...
2nd April	...	...	10	2	...	...	...	...	...	...	...	...	...	...	...	...	...
9th "	...	...	35	2	1	...	...	...	...	...	...	...	...	...	...	...	...
16th "	...	1	233	34	...	...	...	...	...	...	...	...	...	...	...	...	...
23rd "	...	1	82	7	...	...	...	...	...	...	...	...	...	...	...	...	...
30th "	...	1	18	14	...	...	...	...	...	...	...	...	...	...	...	...	...
7th May	...	...	40	6	1	...	...	...	...	...	...	...	...	...	...	...	...
14th "	...	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21st "	2	...	42	28	2	...	...	...	...	...	...	...	...	...	...	...	...
28th "	...	1	41	9	...	...	...	...	...	...	...	...	...	...	...	2	...
4th June	...	...	13	3	...	...	...	...	...	...	...	...	...	...	...	3	...
11th "	...	1	15	11	...	...	...	...	...	...	...	...	...	...	...	6	...
18th "	...	1	57	19	...	...	...	...	...	...	...	...	...	...	...	...	...
25th "	...	1	20	12	1	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	3	22	705	323	6	1	2	12	16	1	...	1	...	...	4	11	...

\* No case of Plague occurred in human beings during above period.

† No Plague discovered in animals during above period.

The above Table shows the number of cases and the number of Plague-infected animals discovered each week in the places affected.

Besides those outbreaks occurring among rodents and accompanied by human cases, Plague rats alone were found in the following places, namely, a Plague-infected rat at Knysna on the 9th January, 1904, one at Queenstown on the 29th January, and at Grahamstown, eleven Plague-infected rats during the period from the 26th May to the 6th of June.

The outbreak in the latter place occurred in the Railway Goods Shed, where there is reason to believe a considerable mortality from the disease took place among the many rodents which previously

had infested the premises. There is no doubt that the infection was introduced by means of goods sent up from Port Elizabeth. Immediately on discovery, measures were adopted to deal with the shed and to destroy all rodents, steps having been taken first for preventing any migration from the affected premises into the rest of the town. These measures were entirely effective, and no further outbreak occurred.

I regret that, owing to pressure of other and more urgent work, I have not yet been able to prepare a full and technical report on Plague generally, as it has occurred in this Colony. Careful records, however, have been kept for long past, and a large amount of valuable and interesting information has been collected, which I hope to be able to put together before long in the form of a comprehensive report.

#### *General Health Administration.*

In view of the short period covered by this report, I do not propose on this occasion to enter into any detailed statement regarding Health matters of a general administrative character, especially as these subjects were very fully discussed in my last Annual Report.

Attached to this Report will be found the Reports of the Medical Inspectors on the working of "The Contagious Diseases Prevention Act, 1895" during the period under report.

In my last Report I entered very fully into the effect of the Betting-houses, Gaming-houses and Brothel Suppression Act, No. 36 of 1902, on the working of the Contagious Diseases Act, and I, therefore, need not deal with this subject again.

In Annexure "E" will be found the Report for the Half-year of Dr. Geo. W. Robertson, the Bacteriological Assistant in this Office, and in Annexure "F" are printed the Reports of the Resident Medical Officers of the N'dabeni and New Brighton Native Reserve Locations.

I have the honour to be,

Sir,

Your obedient Servant,

A. JOHN GREGORY,

Medical Officer of Health  
for the Colony.



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# ANNEXURES.

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REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE  
COLONY.

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ANNEXURE A.

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Statistics relating to Deaths and their Causes registered during the year 1903 in respect of the Thirty-five Chief Towns of the Colony.

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Table 1.—Classification of Diseases.

- „ 2.—Tables showing in regard to the thirty-five chief towns of the Colony, separately and combined, the number of deaths registered for the year 1903, and the rate of mortality per thousand of their respective estimated populations from certain specified diseases and from all other diseases; distinguishing between (*a*) certified and uncertified deaths, (*b*) Europeans and Coloured, and (*c*) males and females.
- „ 3.—Tables showing for each of the thirty-five chief towns of the Colony the number of deaths registered for the year 1903 at each age period; distinguishing between (*a*) Europeans and Coloured and (*b*) males and females.
- „ 4.—Tables showing for the thirty-five chief towns of the Colony combined the number of deaths from certain specified diseases and all other diseases registered for the year 1903 at each age period, distinguishing between (*a*) Europeans and Coloured and (*b*) males and females.
- „ 5.—Tables showing for the thirty-five chief towns of the Colony combined the number of deaths registered for the year 1903, arranged according to classes of disease at each age period; distinguishing between (*a*) Europeans and Coloured and (*b*) males and females.



## ANNEXURE "A."

TABLE NO. I.

Nomenclature of Diseases adopted in the classification of the Causes of Death registered under the provisions of the "Births and Deaths Registration Act, 1895," in the Colony of the Cape of Good Hope.

N.B.—The names of the diseases included under the term "others" is in every case to be specified.

DISEASES.	DISEASES.
<p>CLASS I.—DISEASES DUE TO SPECIFIC ORGANISMS.</p> <p>SUB-CLASS I.—ZYMOTIC DISEASES :</p> <ol style="list-style-type: none"> <li>1. Small-pox—               <ol style="list-style-type: none"> <li>(a) Vaccinated</li> <li>(b) Unvaccinated</li> <li>(c) Not stated</li> </ol> </li> <li>2. Chicken-pox</li> <li>3. Measles</li> <li>4. Rôtheln</li> <li>5. Scarlet Fever</li> <li>6. Typhus</li> <li>7. Relapsing Fever</li> <li>8. Influenza</li> <li>9. Whooping Cough</li> <li>10. Mumps</li> <li>11. Diphtheria and Membranous Croup</li> <li>12. Cerebro-spinal Fever</li> <li>13. Cerebro spinal Meningitis</li> <li>14. Typhoid (Enteric) Fever</li> <li>15. Typho-Malarial Fever</li> <li>16. Simple Continued Fever</li> <li>17. Epidemic Pneumonia</li> <li>18. Remittent Fever</li> <li>19. Intermittent Fever (Malarial Fever, Ague)</li> <li>20. Asiatic Cholera</li> <li>21. Simple Cholera</li> <li>22. Diarrhœa</li> <li>23. Dysentery</li> <li>24. Tuberculosis—               <ol style="list-style-type: none"> <li>(a) Phthisis (Pulmonary Consumption)</li> <li>(b) Tubercular Meningitis</li> <li>(c) Tabes Mesenterica</li> <li>(d) Other forms including Scrofula and Lupus</li> </ol> </li> <li>25. Leprosy</li> <li>26. Rabies (Hydrophobia)</li> <li>27. Glanders (Farcy)</li> <li>28. Splenic Fever (Anthrax)</li> <li>29. Syphilis</li> <li>30. Gonorrhœa (including Stricture of Urethra, Gonorrhœal Rheumatism, Buboes, &amp;c.)</li> <li>31. Erysipelas, Cellulitis</li> <li>32. Pyæmia, Septicæmia, Hospital Gangrene</li> <li>33. Tetanus</li> <li>34. Puerperal Fever</li> <li>35. Plague</li> <li>36. Beri Beri</li> <li>37. Others (including all cases medically certified as "Fever")</li> </ol> <p>SUB-CLASS II.—PARASITIC DISEASES :</p> <ol style="list-style-type: none"> <li>1. Thrush, Stomatitis</li> <li>2. From other vegetable parasites</li> <li>3. Hydatids</li> <li>4. From other animal parasites</li> </ol>	<p>CLASS II.—DIETETIC DISEASES AND CHRONIC POISONING.</p> <ol style="list-style-type: none"> <li>1. Starvation—Want of breast milk</li> <li>2. Senrvy</li> <li>3. Rickets</li> <li>4. Intemperance—               <ol style="list-style-type: none"> <li>(a) Chronic Alcoholism (including affections of special organs)</li> <li>(b) Delirium Tremens</li> </ol> </li> <li>5. Chronic Opium Poisoning</li> <li>6. Plumbism</li> <li>7. Others</li> </ol> <p>CLASS III.—CONSTITUTIONAL DISEASES.</p> <ol style="list-style-type: none"> <li>1. Rheumatic Fever. Rheumatism of the Heart.</li> <li>2. Rheumatism (subacute and chronic)</li> <li>3. Osteo-arthritis</li> <li>4. Gout</li> <li>5. Cancer (Malignant Disease)—               <ol style="list-style-type: none"> <li>(a) Sarcoma</li> <li>(b) Carcinoma</li> <li>(c) Epithelioma</li> <li>(d) Undefined</li> </ol> </li> <li>6. Anæmia, Chlorosis</li> <li>7. Others</li> </ol> <p>CLASS IV.—DEVELOPMENTAL DEFECTS AND DEGENERATION.</p> <ol style="list-style-type: none"> <li>1. Premature Birth</li> <li>2. Accidents occurring during birth</li> <li>3. Atelectasis</li> <li>4. Cyanosis (Malformation of Heart)</li> <li>5. Hydrocephalus</li> <li>6. Spina Bifida</li> <li>7. Imperforate Anus</li> <li>8. Cleft Palate and Hare Lip</li> <li>9. Dentition</li> <li>10. Hæmorrhagic Diathesis</li> <li>11. Old Age (Senile Decay)</li> <li>12. Others</li> </ol> <p>CLASS V.—LOCAL DISEASES.</p> <p>SUB-CLASS I.—DISEASES OF THE NERVOUS SYSTEM :</p> <ol style="list-style-type: none"> <li>1. Acute Inflammation of the Brain or its Membranes</li> <li>2. Softening of the Brain</li> <li>3. Other Diseases of the Brain</li> <li>4. Diseases of the Spinal Cord</li> <li>5. Paralysis (Hemiplegia, Paraplegia)</li> <li>6. Insanity</li> <li>7. Chorea</li> <li>8. Epilepsy</li> <li>9. Convulsions</li> <li>10. Laryngismus Stridulus (Spasmodic Croup)</li> <li>11. Others</li> </ol>

## DISEASES.

## SUB-CLASS II.—DISEASES OF THE ORGANS OF SPECIAL SENSE :

1. Otitis, Otorrhœa
2. Epistaxis and Diseases of Nose.
3. Ophthalmia and Diseases of Eye

## SUB-CLASS III.—DISEASES OF THE CIRCULATORY SYSTEM :

1. Heart Disease (Valvular Disease)
2. Pericarditis
3. Hypertrophy, Dilatation, Fatty Degeneration of Heart
4. Angina Pectoris
5. Syncope
6. Apoplexy (Cerebral Hæmorrhage)
7. Aneurism
8. Senile Gangrene
9. Embolism
10. Varicose Veins and Hæmorrhoids
11. Thrombosis and Phlebitis
12. Others

## SUB-CLASS IV.—DISEASES OF THE RESPIRATORY SYSTEM :

1. Laryngitis
2. Other Diseases of the Larynx and Trachea
3. Asthma, Emphysema
4. Bronchitis
5. Pneumonia
6. Inflammation, Congestion of Lungs
7. Pleurisy, Hydrothorax, Empyema
8. Hæmoptysis
9. Others (including "Cold," "Cough" and "Chest Complaint")

## SUB-CLASS V.—DISEASES OF THE ALIMENTARY CANAL :

1. Tonsilitis (Quinsey)
2. Dyspepsia
3. Diseases of Stomach
4. Hæmatemesis
5. Enteritis, Gastro-Enteritis
6. Ulceration, Perforation of Intestine
7. Melæna
8. Obstruction, Stricture or Strangulation of Intestine
9. Ileus, Intussusception of Intestine
10. Hernia
11. Fistula
12. Peritonitis
13. Others

## SUB CLASS VI.—DISEASES OF THE LIVER :

1. Cirrhosis of Liver
2. Abscess of Liver
3. Jaundice
4. Gallstones
5. Ascites.
6. Diabetes Mellitus.
7. Others

## SUB-CLASS VII.—DISEASES OF THE LYMPHATIC SYSTEM AND DUCTLESS GLANDS :

1. Diseases of the Lymphatic System
2. Leuchæmia
3. Diseases of Spleen
4. Bronchocele
5. Myxœdema
6. Addison's Disease
7. Others

## DISEASES.

## SUB-CLASS VIII.—DISEASES OF THE URINARY SYSTEM AND ORGANS OF GENERATION :

1. Bright's Disease, Nephritis, Uræmia
2. Suppression of Urine
3. Calculus
4. Hæmaturia
5. Diseases of Bladder and of Prostate
6. Stricture of Urethra
7. Ovarian Disease
8. Diseases of Uterus and Vagina
9. Disorders of Menstruation
10. Pelvic Abscess
11. Perineal Abscess
12. Diseases of Testes, Penis and Scrotum
13. Others

## SUB-CLASS IX.—DISEASES OF PARTURITION :

1. Abortion, Miscarriage
2. Puerperal Mania
3. Puerperal Convulsions
4. Placenta Prævia, Flooding
5. Phlegmasia Alba Dolens
6. Other Accidents of Child Birth

## SUB-CLASS X.—DISEASES OF THE BONES AND JOINTS

1. Caries, Necrosis
2. Arthritis, Ostitis, Periostitis
3. Others

## SUB-CLASS XI.—DISEASES OF THE INTEGUMENTARY SYSTEM :

1. Carbuncle
2. Eczema
3. Pemphigus
4. Others

## CLASS VI.—VIOLENCE :

## SUB-CLASS I.—ACCIDENT OR NEGLIGENCE :

1. Fracture of Bones
2. Contusions of Muscles and Viscera
3. Gunshot Wounds
4. Cuts, &c
5. Burn, Scald
6. Sunstroke
7. Lightning
8. Exposure
9. Drowning
10. Suffocation
11. Poison
12. Bite of Snake or Insect
13. Otherwise

## SUB-CLASS II.—SUICIDE :

1. Gunshot Wounds
2. Cut, Stab
3. Poison
4. Drowning
5. Hanging
6. Otherwise

## SUB-CLASS III.—HOMICIDE :

(Murder, Manslaughter)

SUB-CLASS IV.  
Execution

## CLASS VII.—ILL-DEFINED AND NOT SPECIFIED :

1. Dropsy, Anasarca
2. Debility, Atrophy, Inanition
3. Mortification, Gangrene (not Senile or Hospital)
4. Tumour (kind or situation unspecified)
5. Vomiting
6. Abscess
7. Hæmorrhage
8. Sudden (cause unascertained)
9. "Natural Causes"
10. Not specified or ill-defined (including uncertified cases of "Fever")



ANNEXURE "A."

TABLE No. 2.

TABLE showing in regard to each of the thirty-five chief Towns of the Colony the total number of Deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated populations, distinguishing between (a) Certified and Uncertified, (b) Europeans and Coloured, and (c) Males and Females.

Names of Towns.	EUROPEANS.						COLOURED.						ALL RACES.						Names of Towns.						
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.									
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.	Death Rate.		
Cape Town	408	219	627	..	1	1	628	1467	723	573	1,296	3	6	9	1,354	3958	1,131	792	1,923	3	7	10	1,933	2551	Cape Town.
Suburban	459	334	793	1	2	3	796	1650	647	686	1,333	12	9	21	1,354	4638	1106	1020	2126	13	11	24	2150	2776	Suburban
Woodstock.	42	28	70	..	..	..	70	1006	9	9	18	..	..	..	18	1365	51	37	88	..	..	..	88	1063	Woodstock.
Mowbray.	49	18	67	2	..	2	69	1041	62	50	112	7	3	10	122	3814	111	68	179	9	3	12	191	1943	Mowbray.
Claremont.	120	94	214	1	2	3	217	1611	623	245	868	12	15	27	895	4372	743	339	1082	13	17	30	1112	3276	Claremont.
Wynberg.	27	15	42	1	2	3	45	1593	160	80	240	119	109	228	468	7141	187	95	282	120	111	231	513	5445	Wynberg.
Maitland and Rondebosch.)	212	122	334	1	1	1	337	1578	366	265	632	8	5	13	645	5884	578	388	966	9	7	16	982	3039	Maitland and Rondebosch.)
Green Point and Sea Point.	109	66	175	2	2	4	179	1302	137	96	233	5	5	12	245	2542	246	162	408	7	9	16	424	1813	Green Point and Sea Point.
Simon's Town and Kalk Bay—	70	51	121	..	2	1	122	1712	106	102	208	68	56	124	332	5160	176	153	329	68	57	125	454	3348	Simon's Town and Kalk Bay—
Muizenberg.	41	36	77	..	..	..	80	1251	98	75	173	55	50	105	278	5320	139	111	250	57	51	108	358	3080	Muizenberg.
Kimberley	45	44	89	..	..	..	91	1858	156	133	269	2	2	4	273	4444	181	177	358	2	4	6	364	3297	Kimberley.
Beaconsfield.	31	35	66	..	..	..	70	1763	78	81	159	39	41	80	239	4119	109	116	225	41	43	84	309	3161	Beaconsfield.
Port Elizabeth.	47	41	88	3	3	3	93	1595	21	14	35	36	32	68	103	2925	68	55	123	39	34	73	196	2096	Port Elizabeth.
East London.	51	32	83	..	..	..	84	2097	116	106	222	44	40	84	306	5954	167	138	305	44	41	85	390	4265	East London.
Grahamstown.	42	34	76	6	6	6	85	2128	112	105	217	45	44	89	306	6797	154	139	293	51	47	98	391	4602	Grahamstown.
Uitenhage.	25	19	44	1	1	1	48	1381	81	79	160	36	32	68	228	5385	106	98	204	37	35	72	276	3579	Uitenhage.
Paarl.	42	38	80	5	5	5	86	2909	38	40	78	102	79	181	259	5686	80	78	158	107	80	187	345	4593	Paarl.
Graaff-Reinet.	33	31	64	..	..	..	68	3178	68	64	132	60	52	112	244	7803	101	95	196	62	54	116	312	5924	Graaff-Reinet.
King William's Town	21	16	37	1	1	1	39	2298	66	51	117	10	10	20	137	3864	87	67	154	11	11	22	176	3357	King William's Town.
Queenstown.	15	18	33	1	1	1	35	1953	44	35	79	18	20	38	117	3690	59	53	112	19	21	40	152	3015	Queenstown.
Oudtshoorn.	10	19	29	1	1	1	32	1333	35	26	61	14	14	28	149	6069	84	65	149	17	15	32	181	3727	Oudtshoorn.
Worcester.	15	16	31	2	2	2	35	1503	35	35	70	20	17	37	107	4394	52	42	92	20	19	39	141	3494	Worcester.
Craddock.	17	15	32	..	..	..	34	2125	35	35	70	20	17	37	107	4394	52	50	102	20	19	39	141	3494	Craddock.
Beaufort West.	20	15	35	3	3	3	38	1698	46	27	73	9	9	18	84	4633	66	42	108	11	11	22	122	3284	Beaufort West.
Alwal North.	11	13	24	3	3	3	30	1670	19	18	37	18	16	34	71	4345	30	31	61	21	19	40	101	2945	Alwal North.
Somerset East.	12	20	32	1	1	1	34	1704	23	23	46	4	4	8	53	4511	35	43	78	5	4	9	87	2744	Somerset East.
Stellenbosch.	19	6	25	4	4	4	30	2400	33	13	46	25	20	45	91	5811	52	19	71	29	21	50	121	4297	Stellenbosch.
Wellington.	8	5	13	1	1	1	15	1350	12	12	24	3	5	8	32	2562	20	17	37	4	6	10	47	1992	Wellington.
Mossel Bay.	17	7	24	3	3	3	27	2684	10	14	24	..	4	4	28	3728	27	21	48	3	4	7	55	3134	Mossel Bay.
Malmesbury.	2018	1407	3425	48	44	92	3517	1600	3978	3104	7082	790	696	1486	8568	4625	5996	4511	10507	838	740	1578	12085	2984	Malmesbury.
George.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	George.
Robertson.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Robertson.
Burgersdorp.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Burgersdorp.
Swellendam.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Swellendam.
Prince Albert.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Prince Albert.
Grand Total	2018	1407	3425	48	44	92	3517	1600	3978	3104	7082	790	696	1486	8568	4625	5996	4511	10507	838	740	1578	12085	2984	Grand Total

ANNEXURE "A."  
TABLE 2.

TABLE showing in regard to the Thirty-five Chief Towns of the Colony combined, the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their total estimated population from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.						
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.									
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		Death Rate.	Death Rate.	Death Rate.			
Estimated Population, middle of 1903				219,766									185,257									405,023			
Diseases due to Specific Organisms—																									
Small-pox	3	1	4			4	23	7	30		2	2	32	0.17	26	8	34		2	2	36	0.09			
Chicken-pox														0.01								0.00			
Measles	34	16	50			52	83	100	183		19	33	216	1.17	117	116	233		19	35	268	0.66			
Rötheln																									
Scarlet Fever	4	6	10			10	5	1	6				6	0.03	9	7	16				16	0.04			
Relapsing Fever																									
Influenza	15	20	35			35	17	16	33		13	18	51	0.28	32	36	68		5	13	86	0.21			
Whooping Cough	12	17	29			31	35	50	85		8	17	102	0.55	47	67	114		9	10	133	0.33			
Diphtheria and Membranous Croup	28	32	60			61	34	35	69		15	24	93	0.50	62	67	129		15	10	154	0.38			
Cerebro-Spinal Fever																									
Cerebro-Spinal Meningitis	6	4	10			10	9	7	16		1	1	17	0.09	15	11	26		1		27	0.07			
Typhoid (Enteric) Fever, Simple Continued and Fever	80	42	122			122	91	59	150		7	14	171	0.92	171	101	272		7	14	21	293	0.72		
Epidemic Pneumonia																									
Simple Cholera, Diarrhoea, Dysentery	125	97	222			231	260	234	494		177	317	811	4.38	385	331	716		181	145	326	1042	2.57		
Tuberculosis, including Haemoptysis	233	120	353			360	718	628	1346		71	82	153	8.09	951	748	1699		74	86	160	1859	4.59		
Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene	13	10	23			23	24	10	34		1	2	36	0.19	37	20	57		1	2	59	0.15			
Puerperal Fever														0.08											
Plague	11	3	14			14	55	16	71				71	0.38	66	19	85				85	0.21			
Others	9	8	17			17	64	46	110		3	4	114	0.62	73	54	127		3	1	4	131	0.32		
Total	573	385	958	10	11	21	1418	1225	2643	302	291	593	3236	17.46	1991	1610	3601	312	302	614	4215	10.41			
Parasitic Diseases—																									
Thrush, Stomatitis	3		3			3	6	3	9			1	10	0.05	9	3	12		1	1	13	0.03			
From other Vegetable and Animal Parasites	5	3	8			9	4	3	7		1	3	10	0.05	9	6	15		1	3	4	19	0.05		
Total	8	3	11			12	10	6	16		1	4	20	0.11	18	9	27		1	4	5	32	0.08		
Constitutional Diseases—																									
Cancer (Malignant Disease)	68	67	135	2		2	23	31	54		1	4	58	0.31	91	98	189		3	6	195	0.48			
Others	16	15	31			33	19	7	26		5	7	33	0.18	35	22	57		6	3	66	0.16			
Total	84	82	166	3	1	4	42	38	80		6	11	91	0.49	126	120	246		9	6	15	261	0.64		
Developmental Defects and Degeneration—																									
Premature Birth, and Accidents during Birth	56	59	115			125	98	87	185		29	54	239	1.29	154	146	300		32	64	364	0.90			
Malformations	13	15	28			28	21	19	40		2	2	42	0.23	34	34	68		2	2	70	0.17			
Dentition	9	4	13			13	19	8	27		15	27	54	0.29	28	12	40		15	27	67	0.17			
Old Age (Senile Decay)	35	33	68			75	31	54	85		22	39	124	0.67	66	87	153		24	22	199	0.49			
Others	6	7	13			13	10	13	23		1	1	24	0.13	16	20	36		1	1	37	0.09			
Total	119	118	237	5	12	17	179	181	360	65	58	123	483	2.61	298	299	597	70	70	140	737	1.82			





ANNEXURE "A."

TABLE 2.—Continued.

Cape Town, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated populations from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.		M.	F.	P.	M.		F.		P.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Estimated Population, middle of 1903							42,812																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											



TABLE 2.—Continued.

Diseases.	EUROPEANS.					COLOURED.					ALL RACES.				
	Certified.		Uncertified.		Total.	Certified.		Uncertified.		Total.	Certified.		Uncertified.		Total.
	M.	F.	M.	F.		M.	F.	M.	F.		M.	F.	M.	F.	
CAPE TOWN, 1903.—Continued.	M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.	M.	Death Rate.
Diseases of the Nervous System—															
Acute Inflammation of the Brain and its Membranes.	6	5	11	..	..	..	14	11	25	0.76	20	16	36	..	0.48
Convulsions.	6	1	7	..	..	..	22	15	37	1.15	28	16	44	1	0.59
Others.	15	6	21	..	..	..	19	10	29	0.88	34	16	50	..	0.66
Total.	27	12	39	..	..	..	55	36	91	2.79	82	48	130	1	1.73
Diseases of the Circulatory System—															
Heart Disease, Organic Degeneration, Syncope.	38	22	60	1	1	..	41	34	75	2.27	79	56	135	1	1.79
Apoplexy.	20	7	27	..	..	..	10	6	16	0.52	30	13	43	1	0.58
Others.	6	2	8	..	..	..	4	1	5	0.15	10	3	13	..	0.17
Total.	64	31	95	1	1	..	55	41	96	2.94	119	72	191	2	2.55
Diseases of the Respiratory System—															
Bronchitis.	14	12	26	..	..	..	48	48	96	2.91	62	60	122	..	1.61
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.	35	11	46	..	..	..	122	72	194	5.88	157	83	240	..	3.17
Others.	1	..	1	..	..	..	..	..	..	..	1	..	1	..	0.01
Total.	50	23	73	..	..	..	170	120	290	8.80	220	143	363	..	4.79
Diseases of the Alimentary Canal—															
Enteritis, Gastro-Enteritis, Marasmus.	26	33	59	..	..	..	70	58	128	3.88	96	91	187	..	2.47
Others.	7	8	15	..	..	..	5	9	14	0.42	12	17	29	..	0.38
Total.	33	41	74	..	..	..	75	67	142	4.31	108	108	216	..	2.85
Diseases of the Liver.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	12	6	18	..	..	..	2	..	2	0.06	14	6	20	..	0.26
Diseases of the Urinary System and Organs of Generation—															
Bright's Disease, Nephritis, Uremia.	16	3	19	..	..	..	7	7	14	0.42	23	10	33	..	0.44
Others.	11	7	18	..	..	..	3	5	8	0.24	14	12	26	..	0.34
Total.	27	10	37	..	..	..	10	12	22	0.67	37	22	59	..	0.78
Diseases of Parturition.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	..	1	1	..	..	..	..	5	5	0.15	..	6	6	..	0.08
Violence.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	45	4	49	..	..	..	32	12	44	1.33	77	16	93	..	1.23
Ill-defined or not specified—															
Debility, Atrophy, Inanition.	8	2	10	..	..	..	9	10	19	0.58	17	12	29	..	0.38
Others.	1	..	1	..	..	..	7	4	11	0.33	8	4	12	..	0.16
Total.	9	2	11	..	..	..	16	14	30	0.91	25	16	41	..	0.54
All other Diseases not included in the above.	8	6	14	..	..	..	14	10	24	0.73	22	16	38	..	0.50
Grand Total.	408	219	627	1	1	1	723	573	1296	39.58	1131	792	1923	7	25.51

Suburban Municipalities, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated populations from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.				Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.	Death Rate.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Estimated Population, middle of 1903 ..							48,246									29,193																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										</



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
	Death Rate.			Death Rate.			Death Rate.			Death Rate.			Death Rate.			Death Rate.		
SUBURBAN MUNICIPALITIES, 1903.— <i>Continued.</i>																		
Diseases of the Nervous System— Acute Inflammation of the Brain and its Membranes .. .. .	8	7	15	..	..	..	..	..	..	..	..	..	18	20	38	..	..	38
Convulsions .. .. .	12	10	22	..	..	..	15	25	40	41	1	1	27	35	62	1	..	63
Others .. .. .	11	5	16	..	..	..	9	7	16	16	..	..	20	12	32	..	..	32
Total .. .. .	31	22	53	..	..	..	34	45	79	80	1	1	65	67	132	1	..	133
																		1·72
Diseases of the Circulatory System— Heart Disease, Organic Degeneration, Syncope .. .. .	27	19	46	..	..	..	20	19	39	39	..	..	47	38	85	..	..	85
Apoplexy .. .. .	12	8	20	..	..	..	11	11	22	22	..	..	23	19	42	..	..	42
Others .. .. .	6	..	6	..	..	..	6	..	6	6	..	..	12	..	12	..	..	12
Total .. .. .	45	27	72	..	..	..	37	30	67	67	..	..	82	57	139	..	..	139
																		1·79
Diseases of the Respiratory System— Bronchitis .. .. .	18	9	27	..	1	1	46	65	111	114	3	3	64	74	138	..	4	142
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. .. .	31	20	51	..	..	..	81	80	161	164	3	3	112	100	212	3	..	215
Others .. .. .	..	1	1	..	..	..	3	1	4	4	..	..	3	2	5	..	..	5
Total .. .. .	49	30	79	..	1	1	130	146	276	282	3	3	179	176	355	3	4	362
																		4·67
Diseases of the Alimentary Canal— Enteritis, Gastro-Enteritis, Marasmus .. .. .	60	42	102	..	..	..	84	94	178	180	1	1	144	136	280	1	1	282
Others .. .. .	8	5	13	..	..	..	3	8	11	11	..	..	11	13	24	..	..	24
Total .. .. .	68	47	115	..	..	..	87	102	189	191	1	1	155	149	304	1	1	306
																		3·95
Diseases of the Liver .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	5	6	11	..	..	..	6	1	7	7	..	..	11	7	18	..	..	18
																		0·23
Diseases of the Urinary System and Organs of Generation— Bright's Disease, Nephritis, Uremia .. .. .	10	10	20	..	..	..	5	7	12	13	1	1	15	17	32	1	..	33
Others .. .. .	2	8	10	..	..	..	1	1	2	2	..	..	3	9	12	..	..	12
Total .. .. .	12	18	30	..	..	..	6	8	14	15	1	1	18	26	44	1	..	45
																		0·58
Diseases of Parturition .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	..	3	3	..	..	..	..	6	6	6	..	..	..	9	9	..	..	9
																		0·12
Violence .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	26	9	35	..	..	..	35	4	39	39	..	..	61	13	74	..	..	74
																		0·96
Ill-defined or not specified— Debility, Atrophy, Inanition .. .. .	12	4	16	..	..	..	13	11	24	26	1	1	25	15	40	1	1	42
Others .. .. .	2	2	4	..	..	..	2	5	7	8	1	1	4	7	11	..	1	12
Total .. .. .	14	6	20	..	..	..	15	16	31	34	1	2	29	22	51	1	2	54
																		0·70
All other Diseases not included in the above .. .. .	10	8	18	..	..	..	10	6	16	16	..	..	20	14	34	..	..	34
Grand Total .. .. .	459	334	793	1	2	3	647	686	1333	1354	12	9	1106	1020	2126	13	11	2150
																		27·76

ANNEXURE "A."

TABLE 2.—Continued.

Green and Sea Point, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903 and the rate of mortality per 1,000 of their respective estimated populations from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.				
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.				Total.			
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.	Death Rate.
Estimated Population, middle of 1903 ..				6,958																			
Diseases due to Specific Organisms—																							
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Membranous Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid (Enteric) Fever, Simple Continued ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, Typho-Malarial, Remittent Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
and Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Simple Cholera, Diarrhoea, Dysentery ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis, including Hæmoptysis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas, Cellulitis, Pyæmia, Septicæmia, ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	10	5	15	..	..	..	1	4	5	..	..	5	11	9	20	..	..	20	11	9	20	..	2·42
Parasitic Diseases—																							
Thrush, Stomatitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Constitutional Diseases—																							
Cancer (Malignant Disease) ..	2	2	4	..	..	..	..	..	..	..	..	..	2	2	4	..	..	4	2	1	..	..	0·48
Others ..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	..	..	0·12
Total ..	2	3	5	..	..	..	..	..	..	..	..	..	2	3	5	..	..	5	..	..	..	..	0·60
Developmental Defects and Degeneration—																							
Premature Birth, and Accidents during ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Birth ..	2	..	2	..	..	..	..	2	2	..	..	2	2	2	4	..	..	4	..	..	..	..	0·48
Malformations ..	1	1	2	..	..	..	..	..	..	..	..	..	1	1	2	..	..	2	..	..	..	..	0·24
Dentition ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Old Age (Senile Decay) ..	1	2	3	..	..	..	..	..	..	..	..	..	1	2	3	..	..	3	..	..	..	..	0·36
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	4	3	7	..	..	..	..	2	2	..	..	2	4	5	9	..	..	9	4	5	9	..	1·09



TABLE 2.—Continued.

Diseases.	EUROPEANS.										COLOURED.					ALL RACES.				
	Certified.			Uncertified.			Total.	Certified.			Uncertified.		Total.	Certified.			Uncertified.		Total.	
	M.	F.	P.	M.	F.	P.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	P.	Death Rate.		
GREEN AND SEA POINT, 1903.— <i>Continued.</i>																				
Diseases of the Nervous System— Acute Inflammation of the Brain and its Membranes .. .. .	1	2	3															0.36		
Convulsions .. .. .	1	1	2															0.36		
Others .. .. .																				
Total .. .. .	2	3	5															0.72		
Diseases of the Circulatory System— Heart Disease, Organic Degeneration, Syncope .. .. .	5	4	9															1.45		
Apoplexy .. .. .	1	1	1															0.24		
Others .. .. .	1	1	1															0.12		
Total .. .. .	7	4	11															1.81		
Diseases of the Respiratory System— Bronchitis .. .. .	2	1	3															0.36		
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. .. .	3	3	3															0.60		
Others .. .. .	..	..	..															..		
Total .. .. .	5	1	6															0.97		
Diseases of the Alimentary Canal— Enteritis, Gastro-Enteritis, Marasmus Others .. .. .	3	4	7															0.85		
.. .. .	1	1	1															0.12		
Others .. .. .	..	..	..															..		
Total .. .. .	4	4	8															0.97		
Diseases of the Liver .. .. .	..	..	..															..		
.. .. .	..	..	..															..		
Total .. .. .	1	1	1															0.12		
Diseases of the Urinary System and Organs of Generation— Bright's Disease, Nephritis, Uremia Others .. .. .	3	1	4															0.60		
.. .. .	2	1	3															0.36		
Others .. .. .	..	..	..															..		
Total .. .. .	5	2	7															0.97		
Diseases of Parturition .. .. .	..	..	..															..		
.. .. .	..	..	..															..		
Total .. .. .	..	..	..															..		
Violence .. .. .	..	..	..															..		
.. .. .	..	..	..															..		
Total .. .. .	1	2	3															0.72		
Ill-defined or not specified— Debility, Atrophy, Inanition Others .. .. .	..	..	..															..		
.. .. .	..	..	..															..		
Total .. .. .	..	..	..															..		
All other Diseases not included in the above	1	1	2															0.24		
Grand Total .. .. .	42	28	70															10.63		

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans or Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
Estimated Population, middle of 1903 .. .. .				6, 631						3, 199			9, 830					
Diseases due to Specific Organisms—																		
Small-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .. .. .	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Rötheln .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·10
Scarlet Fever .. .. .	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	0·10
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough .. .. .	..	..	..	..	..	..	..	3	5	..	..	5	..	3	5	..	..	0·51
Diphtheria and Membranous Croup .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis .. .. .	..	..	..	..	..	..	..	1	1	..	..	1	..	1	..	..	..	0·10
Typhoid (Enteric) Fever, Simple Continued .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, Typho-Malarial, Remittent Fever .. .. .	1	1	2	..	..	..	1	1	2	..	..	2	2	2	4	..	..	4
Epidemic Pneumonia .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·41
Simple Cholera, Diarrhoea, Dysentery .. .. .	6	..	6	..	..	..	2	4	6	..	..	6	..	4	12	..	..	12
Tuberculosis, including Haemoptysis .. .. .	4	3	7	..	..	..	9	8	17	1	..	18	13	11	24	1	..	25
Erysipelas, Cellulitis, Pyæmia, Septicæmia, .. .. .	..	..	..	..	..	..	..	2	2	..	..	2	..	2	2	..	..	2
and Hospital Gangrene .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	2	..	2	2	..	..	2
Plague .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·20
Others .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	12	4	16	..	..	..	15	21	36	1	..	37	27	25	52	1	..	53
Parasitic Diseases—																		
Thrush, Stomatitis .. .. .	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	1
From other Vegetable and Animal Parasites .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	1
Constitutional Diseases—																		
Cancer (Malignant Disease) .. .. .	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
Others .. .. .	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
Total .. .. .	2	..	2	..	..	..	..	..	..	..	..	..	2	..	2	..	..	2
Developmental Defects and Degeneration—																		
Premature Birth, and Accidents during Birth .. .. .	1	2	3	..	..	..	4	3	7	1	1	2	5	5	10	1	1	2
Malformations .. .. .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	12
Dentition .. .. .	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
Old Age (Senile Decay) .. .. .	2	..	2	..	..	..	1	2	3	..	..	3	..	2	5	..	..	1
Others .. .. .	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	5
Total .. .. .	4	2	6	..	..	..	6	5	11	1	1	2	10	7	17	1	1	19
																		19
																		1·93



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
Diseases.	Total.			Total.			Total.			Total.			Total.			Total.		
	Death Rate.			Death Rate.			Death Rate.			Death Rate.			Death Rate.			Death Rate.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
KALK BAY, MUIZENBERG AND SIMONS-TOWN, 1903.—Continued.																		
Diseases of the Nervous System—																		
Acute Inflammation of the Brain and its Membranes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	3	2	5	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..
Diseases of the Circulatory System—																		
Heart Disease, Organic Degeneration, Syncope	3	1	4	1	..	1	..	..	3	11	3	1	3	1	4	16	1	63
Apoplexy	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	0	10
Others	2	..	2	..	..	2	..	..	..	..	..	..	..	..	..	2	0	20
Total	5	1	6	1	..	1	..	..	4	12	3	1	4	9	4	19	1	93
Diseases of the Respiratory System—																		
Bronchitis	1	..	1	..	..	1	..	..	1	6	..	..	..	7	..	7	0	71
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy	3	3	6	..	..	6	..	..	7	5	12	2	2	18	2	20	2	03
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	4	3	7	..	..	7	..	..	8	10	18	2	2	25	2	27	2	75
Diseases of the Alimentary Canal—																		
Enteritis, Gastro Enteritis, Marasmus	5	1	6	..	..	6	..	..	8	4	12	..	..	13	5	18	1	83
Others	..	2	2	..	..	2	..	..	1	..	1	..	..	2	2	3	0	31
Total	5	3	8	..	..	8	..	..	9	4	13	..	..	14	7	21	1	14
Diseases of the Liver																		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	2	..	2	1	..	3	0.45	..	..	..	..	..	..	2	..	3	0	31
Diseases of the Urinary System and Organs of Generation—																		
Bright's Disease, Nephritis, Uremia	1	2	3	..	..	3	0.45	..	3	..	3	..	..	4	2	6	..	61
Others	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	1	0	10
Total	1	2	3	..	..	3	0.45	..	4	..	4	..	..	5	2	7	0	71
Diseases of Parturition																		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Violence																		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	7	1	8	..	..	8	1.21	..	9	1	10	1	..	16	2	18	1	93
Ill-defined or not specified—																		
Debility, Atrophy, Inanition	1	..	1	..	..	1	0.15	..	1	2	3	..	..	2	2	4	..	41
Others	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	2	..	20
Total	1	..	1	..	..	1	0.15	..	3	2	5	..	..	4	2	6	..	61
All other Diseases not included in the above																		
..	3	..	3	..	..	3	0.45	..	1	..	1	..	1	4	..	5	0	51
Grand Total	49	18	67	2	..	69	10.41	..	62	50	112	7	3	111	68	179	9	19.43





TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
KIMBERLEY, 1903.—Continued.	Total.			Total.			Total.			Total.			Total.			Total.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
	Death Rate.			Death Rate.			Death Rate.			Death Rate.			Death Rate.			Death Rate.		
	Diseases.			Diseases.			Diseases.			Diseases.			Diseases.			Diseases.		
	Total.			Total.			Total.			Total.			Total.			Total.		
Diseases of the Nervous System—																		
Acute Inflammation of the Brain and its	2	4	6			6	12	5	17				14	9	23			
Membranes	4	3	7	1	1	8	6	10	16	3	4	20	10	13	23	23	3	5
Convulsions	2	2	4			4	8	5	13			13	10	7	17			
Others													10	7	17			
Total	8	9	17	1	1	18	26	20	46	1	3	4	34	29	63	2	3	5
Diseases of the Circulatory System—																		
Heart Disease, Organic Degeneration,																		
Syncope	9	7	16			16	33	10	43				42	17	59			
Apoplexy	4	4	8			8	5	1	6				9	5	14			
Others	3		3			3	2		2				5		5			
Total	16	11	27			27	40	11	51				56	22	78			
Diseases of the Respiratory System—																		
Bronchitis	2		2		1	3	10	15	25	1	1	2	12	15	27	1	2	3
Pneumonia, Inflammation. Congestion of	6	4	10			10	23	37	27	5	3	8	23	41	28	5	3	8
the Lungs, Pleurisy	2		2			2		2	2				2	2	4			
Others																		
Total	10	4	14		1	15	24	54	29	6	4	10	25	58	31	6	5	11
Diseases of the Alimentary Canal—																		
Enteritis, Gastro-Enteritis, Marasmus	12	16	28			28	32	38	70	2	1	3	44	54	98	2	1	3
Others							3	1	4				3	1	4			
Total	12	16	28			28	35	39	74	2	1	3	47	55	102	2	1	3
Diseases of the Liver																		
Total	5	3	8			8	2		2				7	3	10			
Diseases of the Urinary System and Organs																		
of Generation—																		
Bright's Disease, Nephritis, Uremia	3	1	4			4	5	3	8				8	4	12			
Others	2	2	4			4	3	1	4				5	3	8			
Total	5	3	8			8	8	4	12				13	7	20			
Diseases of Parturition																		
Total		1	1			1		2	2					3	3			
Violence																		
Total	7	2	9			9	30	4	34				37	6	43			
Ill-defined or not specified—																		
Debility, Atrophy, Inanition	1	2	3			3	2		2				3	2	5			
Others		1	1			1	1		1				1	1	2			
Total	1	3	4			4	3		3				4	3	7			
All other Diseases not included in the above	4	3	7			7	28		28				32	3	35			
Grand Total	120	94	214	1	2	3	623	245	868	12	15	27	743	339	1082	13	17	30





TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
BEACONSFIELD, 1903.—Continued.																		
Diseases of the Nervous System—																		
Acute Inflammation of the Brain and its Membranes.	2	..	2	..	..	2	0.70	1	4	5	..	5	3	4	7	..	..	7
Convulsions .. ..	..	1	1	..	..	1	0.35	2	3	5	1	6	2	4	6	1	..	7
Others .. ..	1	..	1	..	..	1	0.35	2	..	2	..	2	3	..	3	..	..	3
Total .. ..	3	1	4	..	..	4	1.39	5	7	12	1	13	8	8	16	1	1	17
Diseases of the Circulatory System—																		
Heart Disease, Organic Degeneration, Syncope .. ..	..	1	1	..	..	1	0.35	9	7	16	..	16	9	8	17	..	..	17
Apoplexy .. ..	1	1	2	..	..	2	0.70	2	1	3	..	3	3	2	5	..	..	5
Others .. ..	1	..	1	..	..	1	0.35	..	1	1	..	1	1	1	2	..	..	2
Total .. ..	2	2	4	..	..	4	1.39	11	9	20	..	20	13	11	24	..	..	24
Diseases of the Respiratory System—																		
Bronchitis .. ..	..	..	..	..	..	..	..	5	8	13	..	14	5	8	13	..	1	14
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. ..	6	2	8	1	..	9	3.14	39	9	48	41	89	45	11	56	42	48	146
Others .. ..	..	..	..	..	..	..	..	1	..	1	..	1	1	..	1	..	..	1
Total .. ..	6	2	8	1	..	9	3.14	45	17	62	41	90	51	19	70	42	49	161
Diseases of the Alimentary Canal—																		
Enteritis, Gastro-Enteritis, Marasmus .. ..	7	1	8	..	..	8	2.79	12	8	20	..	20	19	9	28	..	..	28
Others .. ..	..	1	1	..	..	1	0.35	1	..	1	1	2	1	1	2	1	..	3
Total .. ..	7	2	9	..	..	9	3.14	13	8	21	1	22	20	10	30	1	1	31
Diseases of the Liver .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. ..	..	..	..	..	..	..	..	2	..	2	..	2	2	..	2	..	..	2
Diseases of the Urinary System and Organs of Generation—																		
Bright's Disease, Nephritis, Uræmia .. ..	1	1	2	..	..	2	0.70	1	2	3	..	3	2	3	5	..	..	5
Others .. ..	1	..	1	..	..	1	0.35	2	..	2	..	2	3	..	3	..	..	3
Total .. ..	2	1	3	..	..	3	1.05	3	2	5	..	5	5	3	8	..	..	8
Diseases of Parturition .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. ..	..	1	1	..	..	1	0.35	..	..	..	..	..	..	1	1	..	..	1
Violence .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. ..	2	..	2	..	..	2	0.70	6	..	6	..	6	8	..	8	..	..	8
Ill-defined or not specified—																		
Debility, Atrophy, Inanition .. ..	..	..	..	1	1	1	0.35	1	..	1	11	19	1	..	1	11	8	19
Others .. ..	..	..	1	..	..	1	0.35	..	..	..	..	..	1	..	1	..	..	1
Total .. ..	1	..	1	1	1	2	0.70	1	..	1	11	19	2	..	2	11	8	21
All other Diseases not included in the above	1	1	2	..	..	2	0.70	16	..	16	..	16	17	1	18	..	..	18
Grand Total .. ..	27	15	42	1	2	45	15.69	160	80	240	119	228	187	95	282	120	111	513

ANNEXURE "A."

TABLE 2.—Continued.

Port Elizabeth, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																												
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.				Total.																																											
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.																																									
	Death Rate.	Total.			Total.			Total.			Total.			Total.			Total.			Total.																																											
Estimated Population, middle of 1903 .. .. .	21,352																					10,962																					32,314																				
Diseases due to Specific Organisms—																																																															
Small-pox .. .. .	1	..	1	..	..	..	1	0-05	..	..	..	15	1-37	14	2	16	..	..	..	16	0-50	Small-pox.																																									
Chicken-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox.																																									
Measles .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Measles.																																									
Rötheln .. .. .	..	1	1	..	..	..	1	0-05	..	..	1	0-09	..	1	1	2	..	..	..	2	0-06	Rötheln.																																									
Scarlet Fever .. .. .	..	..	..	..	..	..	3	0-14	..	..	..	..	..	3	..	3	..	..	..	3	0-09	Scarlet Fever.																																									
Relapsing Fever .. .. .	3	..	3	..	..	..	4	0-61	..	..	..	10	0-91	9	14	23	..	..	..	23	0-71	Relapsing Fever.																																									
Influenza .. .. .	5	8	13	..	..	..	13	0-33	..	..	1	0-18	2	3	5	8	1	..	..	9	0-28	Influenza.																																									
Whooping Cough .. .. .	2	5	7	..	..	..	7	0-33	..	..	..	..	..	..	..	..	..	..	..	1	0-03	Whooping Cough.																																									
Diphtheria and Membranous Croup .. .. .	..	..	..	..	..	..	1	0-05	..	..	..	..	..	..	..	..	..	..	..	..	0-28	Diphtheria and Membranous Croup.																																									
Cerebro-Spinal Fever .. .. .	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	0-03	Cerebro Spinal Fever.																																									
Cerebro-Spinal Meningitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Cerebro Spinal Meningitis.																																									
Typhoid (Enteric) Fever, Simple Continued .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Typhoid (Enteric) Fever, Simple Continued																																									
Fever, Typho-Malarial, Remittent Fever .. .. .	11	1	12	..	..	..	12	0-56	..	..	..	12	1-09	19	5	24	..	..	..	24	0-74	Fever, Typho-Malarial, Remittent Fever and Fever.																																									
and Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Epidemic Pneumonia.																																									
Epidemic Pneumonia .. .. .	15	10	25	..	..	..	25	1-17	..	..	..	37	3-38	36	26	62	..	..	..	62	1-92	Simple Cholera, Diarrhoea, Dysentery.																																									
Simple Cholera, Diarrhoea, Dysentery .. .. .	27	6	33	..	..	..	33	1-55	..	..	1	15-14	114	82	196	3	1	..	..	199	6-16	Tuberculosis, including Haemoptysis.																																									
Tuberculosis, including Haemoptysis .. .. .	..	1	1	..	..	..	1	0-05	..	..	2	0-18	2	1	3	..	..	..	..	3	0-09	Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene.																																									
Erysipelas, Cellulitis, Pyæmia, Septicæmia, .. .. .	..	1	1	..	..	..	1	0-05	..	..	..	..	..	..	..	..	..	..	..	1	0-03	Puerperal Fever.																																									
and Hospital Gangrene .. .. .	6	3	9	..	..	..	9	0-42	..	..	59	5-38	55	13	68	..	..	..	..	68	2-10	Bubonic Plague.																																									
Puerperal Fever .. .. .	..	1	1	..	..	..	1	0-05	..	..	4	0-36	4	3	5	..	..	..	..	5	0-15	Others.																																									
Bubonic Plague .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Total.																																									
Others .. .. .	71	37	108	..	..	..	108	5-06	188	116	304	3	1	4	308	28-10	259	153	412	3	1	416	12-87																																								
Total .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Parasitic Diseases—																																									
Parasitic Diseases—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Thrush, Stomatitis.																																									
Thrush, Stomatitis .. .. .	1	..	1	..	..	..	1	0-05	2	1	1	0-18	2	1	2	..	..	..	..	2	0-06	From other Vegetable and Animal Parasites																																									
From other Vegetable and Animal Parasites .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Total.																																									
Total .. .. .	1	..	1	..	..	..	1	0-05	2	1	3	0-27	3	1	4	..	..	..	..	4	0-12	Constitutional Diseases—																																									
Constitutional Diseases—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Cancer (Malignant Disease).																																									
Cancer (Malignant Disease) .. .. .	7	6	13	..	..	..	13	0-61	1	4	5	0-46	8	10	18	..	..	..	..	18	0-56	Others.																																									
Others .. .. .	1	2	3	..	..	..	3	0-14	1	..	1	0-09	2	2	4	..	..	..	..	4	0-12	Total.																																									
Total .. .. .	8	8	16	..	..	..	16	0-75	2	4	6	0-55	10	12	22	..	..	..	..	22	0-68	Developmental Defects and Degeneration—																																									
Developmental Defects and Degeneration—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Premature Birth, and Accidents during Birth.																																									
Premature Birth, and Accidents during Birth .. .. .	6	7	13	..	1	1	14	0-66	9	11	20	2-10	15	18	33	3	1	4	37	1-15	Malformations.																																										
Malformations .. .. .	2	2	4	..	..	..	4	0-19	1	1	2	0-18	3	3	6	..	..	..	6	0-19	Dentition.																																										
Dentition .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Old Age (Senile Decay).																																									
Old Age (Senile Decay) .. .. .	7	2	9	..	1	1	10	0-47	1	4	5	0-46	8	6	14	..	..	1	15	0-46	Others.																																										
Others .. .. .	..	1	1	..	..	..	1	0-05	..	1	1	0-09	..	2	2	..	..	..	2	0-06	Total.																																										
Total .. .. .	15	12	27	..	2	2	29	1-36	14	17	31	3-10	29	29	58	3	2	5	63	1-95																																											



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.												
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.			Diseases.						
	M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.	Certified.	Uncertified.	Total.	Death Rate.	P.	F.	P.	Total.
PORT ELIZABETH, 1903.—Continued.																									
Diseases of the Nervous System—																									
Acute Inflammation of the Brain and its Membranes.																									
Convulsions .. .. .																									
Others .. .. .																									
Total .. .. .																									
Diseases of the Circulatory System—																									
Heart Disease, Organic Degeneration.																									
Syncope .. .. .																									
Apoplexy .. .. .																									
Others .. .. .																									
Total .. .. .																									
Diseases of the Respiratory System—																									
Bronchitis .. .. .																									
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. .. .																									
Others .. .. .																									
Total .. .. .																									
Diseases of the Alimentary Canal—																									
Enteritis, Gastro-Enteritis, Marasmus .. .. .																									
Others .. .. .																									
Total .. .. .																									
Diseases of the Liver .. .. .																									
Total .. .. .																									
Diseases of the Urinary System and Organs of Generation—																									
Bright's Disease, Nephritis, Uremia .. .. .																									
Others .. .. .																									
Total .. .. .																									
Diseases of Parturition .. .. .																									
Total .. .. .																									
Violence .. .. .																									
Total .. .. .																									
Ill-defined or not specified—																									
Debility, Atrophy, Inanition .. .. .																									
Others .. .. .																									
Total .. .. .																									
All other Diseases not included in the above .. .. .																									
Grand Total .. .. .																									





TABLE 2.—Continued.

Diseases.	EUROPEANS.				COLOURED.				ALL RACES.			
	Certified.		Uncertified.		Certified.		Uncertified.		Certified.		Uncertified.	
	M.	F.	P.	Death Rate.	M.	F.	P.	Death Rate.	M.	F.	P.	Death Rate.
EAST LONDON, 1903.— <i>Continued.</i>												
Diseases of the Nervous System— Acute Inflammation of the Brain and its Membranes .. .. .	1	2	3	0.22	1	2	3	0.31	2	4	6	0.26
Convulsions .. .. .	2	2	4	0.29	..	..	..	..	2	2	4	0.17
Others .. .. .	3	3	6	0.44	2	3	5	0.52	5	6	11	0.47
Total .. .. .	6	7	13	0.95	3	5	8	0.83	9	12	21	0.90
Diseases of the Circulatory System— Heart Disease, Organic Degeneration, Syncope .. .. .	6	1	7	0.51	6	5	11	1.14	12	6	18	0.77
Apoplexy .. .. .	1	..	1	0.07	..	..	..	..	1	..	1	0.04
Others .. .. .	1	1	2	0.15	1	..	1	0.10	2	1	3	0.13
Total .. .. .	8	2	10	0.73	7	5	12	1.25	15	7	22	0.94
Diseases of the Respiratory System— Bronchitis .. .. .	3	1	4	0.29	10	9	19	1.97	13	10	23	0.98
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. .. .	9	5	14	1.02	29	18	47	4.88	33	23	61	2.61
Others .. .. .	2	1	3	0.22	..	..	..	..	2	1	3	0.13
Total .. .. .	14	7	21	1.53	39	27	66	6.85	53	34	87	3.72
Diseases of the Alimentary Canal— Enteritis, Gastro-Enteritis, Marasmus Others .. .. .	22	19	41	3.05	16	14	30	3.32	38	33	71	3.16
.. .. .	4	1	5	0.36	3	2	5	0.52	7	3	10	0.43
Total .. .. .	26	20	46	3.42	19	16	35	3.84	45	36	81	3.59
Diseases of the Liver .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	2	1	3	0.22	3	..	3	0.31	5	1	6	0.26
Diseases of the Urinary System and Organs of Generation— Bright's Disease, Nephritis, Uræmia Others .. .. .	2	..	2	0.15	2	..	2	0.21	4	..	4	0.17
.. .. .	2	..	2	0.15	..	..	..	..	2	..	2	0.09
Total .. .. .	4	..	4	0.29	2	..	2	0.21	6	..	6	0.26
Diseases of Parturition .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Violence .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	12	..	12	0.87	8	3	11	1.14	20	3	23	0.93
Ill-defined or not specified— Debility, Atrophy, Inanition Others .. .. .	1	1	2	0.15	1	..	1	0.10	2	1	3	0.13
.. .. .	..	..	..	..	1	..	1	0.10	1	..	1	0.04
Total .. .. .	1	1	2	0.15	2	..	2	0.21	3	1	4	0.17
All other Diseases not included in the above Grand Total .. .. .	4	2	6	0.44	3	3	6	0.62	7	5	12	0.51
	109	66	175	13.02	137	96	233	25.42	246	162	408	18.13

ANNEXURE "A."

TABLE 2.—Continued.

Grahamstown, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases ; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.											
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.				Certified.			Uncertified.			Total.				
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.	
Estimated Population, middle of 1903 ..					7,127																									
Diseases due to Specific Organisms—																														
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·15	
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2·51	
Measles ..	5	1	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Influenza ..	1	..	1	..	..	..	..	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·29	
Whooping Cough ..	..	..	..	..	..	..	..	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·37	
Diphtheria and Membranous Croup ..	..	..	2	..	..	..	..	0·28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·22	
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Typhoid (Enteric) Fever, Simple Continued ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Fever, Typho-Malarial, Remittent Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
and Fever ..	..	2	2	..	..	..	..	0·28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·29	
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Simple Cholera, Diarrhoea, Dysentery ..	3	2	5	..	..	..	..	0·70	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3·47	
Tuberculosis including Haemoptysis ..	6	3	9	..	..	..	..	1·26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4·65	
Erysipelas, Cellulitis, Pyæmia, Septicæmia, ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
and Hospital Gangrene ..	1	..	1	..	..	..	..	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·07	
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·07	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·07	
Total ..	18	9	27	..	..	..	27	3·79	..	..	..	..	38	46	84	27	27	54	138	21·45	..	..	..	..	165	12·17	..	..	Total.	
Parasitic Diseases—																														
Thrush, Stomatitis ..	1	..	1	..	..	..	1	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·7	
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	1	..	1	..	..	..	1	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·07	Total.
Constitutional Diseases—																														
Cancer (Malignant Disease) ..	..	4	4	..	..	..	4	0·56	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	0·37	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	0·15	
Total ..	..	4	4	..	..	..	4	0·56	..	..	..	..	2	1	3	..	..	..	3	0·47	..	..	..	..	7	0·52	..	..	Total.	
Developmental Defects and Degeneration—																														
Premature Birth, and Accidents during ..	2	..	2	..	..	1	1	0·42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·59	
Birth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Malformations ..	1	..	1	..	..	..	..	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·18	
Deafness ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Old Age (Senile Decay) ..	3	3	6	..	..	..	..	0·84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·74	
Others ..	..	1	1	..	..	..	..	0·14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·07	
Total ..	6	4	10	..	..	1	11	1·54	..	..	..	..	2	2	4	8	12	20	24	3·73	..	..	..	..	8	6	14	8	35	2·58



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.								
	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.
	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.	
GRAHAMSTOWN, 1903.—Continued.																					
Diseases of the Nervous System—																					
Acute Inflammation of the Brain and its Membranes.	1	..	..	1	..	..	..	0.14	3	..	3	..	..	3	0.47	3	..	3	..	3	0.22
Convulsions.	2	6	8	..	..	..	6	1.12	..	1	1	8	1	9	1.55	10	2	1	1	11	0.81
Others.	..	..	..	..	..	..	..	..	..	..	2	..	..	8	1.24	8	..	..	..	16	1.18
Total.	3	6	9	..	..	..	9	1.26	9	2	12	8	1	9	3.26	21	8	1	9	30	2.21
Diseases of the Circulatory System—																					
Heart Disease, Organic Degeneration, Syncope.	9	4	13	..	..	..	2	1.82	2	1	3	..	..	3	0.47	11	5	16	..	16	1.18
Apoplexy.	4	2	6	..	..	..	..	0.84	..	2	2	..	..	2	0.31	4	4	8	..	8	0.59
Others.	..	..	..	..	..	..	..	..	..	2	..	..	..	2	0.31	2	..	2	..	2	0.15
Total.	13	6	19	..	..	..	4	2.67	4	3	7	..	..	7	1.09	17	9	26	..	26	1.92
Diseases of the Respiratory System—																					
Bronchitis.	3	2	5	..	..	..	4	0.70	4	7	11	2	4	6	2.64	7	9	16	2	22	1.62
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.	3	2	5	..	..	..	22	0.70	22	17	39	2	1	3	6.53	25	19	44	2	47	3.47
Others.	..	1	1	..	..	..	1	0.14	1	1	2	15	9	24	4.04	1	2	3	15	27	1.99
Total.	6	5	11	..	..	..	27	1.54	27	25	52	19	14	33	13.21	33	30	63	19	96	7.08
Diseases of the Alimentary Canal—																					
Enteritis, Gastro-Enteritis, Marasmus.	11	9	20	..	..	..	14	2.81	14	14	28	2	..	2	4.66	25	23	48	2	50	3.66
Others.	2	1	3	..	..	..	..	0.42	..	..	..	..	..	..	..	2	1	3	..	3	0.22
Total.	13	10	23	..	..	..	14	3.23	14	14	28	2	..	2	4.66	27	24	51	2	53	3.91
Diseases of the Liver.																					
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	1	1	2	..	..	..	..	0.28	..	..	..	..	..	..	..	1	1	2	..	2	0.15
Diseases of the Urinary System and Organs of Generation—																					
Bright's Disease, Nephritis, Uremia.	2	1	3	..	..	..	2	0.42	2	2	4	..	..	..	0.62	4	3	7	..	7	0.52
Others.	1	1	2	..	..	..	..	0.28	..	..	..	..	..	..	..	1	1	2	..	2	0.15
Total.	3	2	5	..	..	..	2	0.70	2	2	4	..	..	..	0.62	5	4	9	..	9	0.66
Diseases of Parturition.																					
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	1	1	1	..	..	..	1	0.14	1	1	1	..	..	..	0.16	1	2	2	..	2	0.15
Violence.																					
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	2	1	3	..	..	..	4	0.42	4	1	5	..	..	..	0.78	6	2	8	..	8	0.59
Ill-defined or not specified—																					
Debility, Atrophy, Inanition.	2	2	4	..	..	..	1	0.56	1	2	3	3	2	5	1.24	3	4	7	3	12	0.88
Others.	..	..	..	..	..	..	1	..	1	..	1	1	..	1	0.31	1	..	1	1	2	0.15
Total.	2	2	4	..	..	..	2	0.56	2	2	4	4	2	6	1.55	4	4	8	4	14	1.03
All other diseases not included in the above.																					
..	2	..	2	..	..	..	2	0.28	2	2	4	..	..	..	0.62	4	2	6	..	6	0.44
Grand Total.	70	51	121	..	1	1	106	17.12	106	102	208	68	56	124	51.60	176	153	329	68	454	33.48

ANNEXURE "A."  
TABLE 2.—Continued.  
Uitenhage, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.				COLOURED.				ALL RACES.				Diseases.	
	Certified.		Uncertified.		Certified.		Uncertified.		Certified.		Uncertified.			
	M.	F.	P.	Total.	M.	F.	P.	Total.	M.	F.	P.	Total.		
Estimated Population, middle of 1903 .. .. .														
Diseases due to Specific Organisms—														
Small-pox .. .. .	2	1	3	..	..	..	..	2	10	9	2	11	13	1-12
Chicken-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	0-09
Measles .. .. .	..	1	1	..	..	..	..	..	..	..	1	1	1	..
Rötheln .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza .. .. .	..	..	..	..	..	..	1	0-38	2	..	1	1	2	0-17
Whooping Cough .. .. .	..	..	..	..	..	1	1	0-38	2	..	1	1	2	0-17
Diphtheria and Membranous Croup .. .. .	1	..	1	..	..	1	1	0-38	1	1	2	1	3	0-26
Cerebro-Spinal Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid (Enteric) Fever, Simple Continued .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, Typho-Malarial, Remittent Fever .. .. .	1	..	1	..	..	..	1	1-15	6	3	3	6	7	0-60
and Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Pneumonia .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Simple Cholera, Diarrhoea, Dysentery .. .. .	3	3	6	..	..	6	5	3-64	19	9	5	14	25	2-15
Tuberculosis, including Hemoptysis .. .. .	2	1	3	..	..	11	15	12-63	66	25	18	43	69	5-94
Erysipelas, Cellulitis, Pyæmia, Septicæmia, .. .. .	..	..	..	..	..	..	..	..	1	1	..	1	1	0-09
and Hospital Gangrene .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	9	6	15	..	..	15	2-35	20-67	108	48	32	80	123	10-58
Parasitic Diseases—														
Thrush, Stomatitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
From other Vegetable and Animal Parasites .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Constitutional Diseases—														
Cancer (Malignant Disease) .. .. .	..	..	..	1	..	1	0-16	0-19	1	..	1	1	2	0-17
Others .. .. .	..	..	..	..	..	..	..	0-19	1	..	..	..	1	0-09
Total .. .. .	..	..	..	1	..	1	0-16	0-38	2	..	1	1	3	0-26
Developmental Defects and Degeneration—														
Premature Birth, and Accidents during Birth .. .. .	1	2	3	..	..	..	3	0-77	4	..	3	7	7	0-60
Malformations .. .. .	..	1	1	..	..	..	1	0-19	1	..	1	2	2	0-17
Dentition .. .. .	2	2	4	..	..	..	1	0-19	3	..	3	5	5	0-43
Old Age (Senile Decay) .. .. .	1	2	3	..	..	..	3	2-49	13	2	6	8	16	1-38
Others .. .. .	1	1	2	..	..	..	2	0-19	1	..	2	3	3	0-26
Total .. .. .	5	8	13	..	..	13	2-03	3-83	20	11	14	25	33	2-84





ANNEXURE "A."  
TABLE 2.—Continued.  
Paarl, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of morality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																				
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.																							
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.																					
Estimated Population, middle of 1903 ..																				4,898						6,143						11,041							
Diseases due to Specific Organisms—																				Diseases due to Specific Organisms—																			
Small-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Small-pox.																			
Chicken-pox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox.																			
Measles .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Measles.																			
Rötheln .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Rötheln.																			
Scarlet Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Scarlet Fever.																			
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Relapsing Fever.																			
Influenza .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Influenza.																			
Whooping Cough .. .. .	1	..	1	..	..	..	1	4	5	..	..	..	3	4	6	..	..	6	..	Whooping Cough.																			
Diphtheria and Membranous Croup .. .. .	5	3	8	..	..	..	6	9	15	..	..	..	11	12	23	..	..	23	..	Diphtheria and Membranous Croup.																			
Cerebro-Spinal Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Cerebro-Spinal Fever.																			
Cerebro-Spinal Meningitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Cerebro-Spinal Meningitis.																			
Typhoid (Enteric) Fever, Simple Continued and Remittent .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Typhoid (Enteric) Fever, Simple Continued and Remittent.																			
Fever, Typho-Malarial, Remittent Fever and Fever .. .. .	1	1	2	..	..	..	3	2	5	1	..	1	6	3	7	1	..	8	..	Fever, Typho-Malarial, Remittent Fever and Fever.																			
Epidemic Pneumonia .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Epidemic Pneumonia.																			
Simple Cholera, Diarrhoea, Dysentery .. .. .	3	4	7	..	1	1	5	6	11	..	1	1	12	10	18	..	2	20	..	Simple Cholera, Diarrhoea, Dysentery.																			
Tuberculosis, including Haemoptysis .. .. .	1	3	4	..	..	..	19	17	36	..	..	..	36	20	40	..	..	40	..	Tuberculosis, including Haemoptysis.																			
Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene.																			
Puerperal Fever .. .. .	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	Puerperal Fever.																			
Plague .. .. .	..	1	1	..	..	..	..	..	2	..	..	..	2	3	3	..	..	3	..	Plague.																			
Others .. .. .	..	..	..	..	..	..	..	..	2	..	..	..	2	3	3	..	..	3	..	Others.																			
Total .. .. .	11	13	24	..	1	1	37	42	79	1	1	2	81	55	103	1	2	106	9·60	Total.																			
Parasitic Diseases—																				Parasitic Diseases—																			
Thrush, Stomatitis .. .. .	..	..	1	..	..	..	..	1	1	..	..	..	1	1	1	..	..	1	0·09	Thrush, Stomatitis.																			
From other Vegetable and Animal Parasites .. .. .	..	..	..	..	..	..	1	..	1	..	..	..	1	..	2	..	..	2	0·18	From other Vegetable and Animal Parasites.																			
Total .. .. .	1	..	1	..	..	..	1	1	2	..	..	..	2	1	3	..	..	3	0·27	Total.																			
Constitutional Diseases—																				Constitutional Diseases—																			
Cancer (Malignant Disease) .. .. .	3	1	4	..	..	..	1	1	2	..	..	..	2	4	6	..	..	6	0·54	Cancer (Malignant Disease).																			
Others .. .. .	1	2	3	..	..	..	3	2	5	..	..	..	5	4	8	..	..	8	0·72	Others.																			
Total .. .. .	4	3	7	..	..	..	4	3	7	..	..	..	7	8	14	..	..	14	1·27	Total.																			
Developmental Defects and Degeneration—																				Developmental Defects and Degeneration—																			
Premature Birth, and Accidents during Birth .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·36	Premature Birth, and Accidents during Birth.																			
Malformations .. .. .	2	2	4	..	..	..	7	4	11	..	..	..	11	9	15	..	..	15	1·36	Malformations.																			
Dentition .. .. .	..	..	..	..	..	..	1	..	1	..	..	..	1	1	1	..	..	1	0·09	Dentition.																			
Old Age (Senile Decay) .. .. .	1	1	2	..	..	..	4	..	4	..	..	..	4	5	6	..	..	6	0·54	Old Age (Senile Decay).																			
Others .. .. .	..	..	..	..	..	..	..	3	3	..	..	..	3	3	3	..	..	3	0·27	Others.																			
Total .. .. .	5	3	6	..	..	..	14	9	23	..	..	..	23	17	29	..	..	29	2·63	Total.																			



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	P.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
PAARL, 1903.—Continued.																		
Diseases of the Nervous System—																		
Acute Inflammation of the Brain and its Membranes.	1	1	2			2												
Convulsions.	2		2			2												
Others.	2	1	3			3												
Total.	5	2	7			7												
Diseases of the Circulatory System—																		
Heart Disease, Organic Degeneration, Syncope.	3	1	4			4												
Apoplexy.	1	3	4			4												
Others.	1		1			1												
Total.	5	4	9			9												
Diseases of the Respiratory System—																		
Bronchitis.																		
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.	3	3	6			6												
Others.																		
Total.	3	3	6			6												
Diseases of the Alimentary Canal—																		
Enteritis, Gastro-Enteritis, Marasmus.	2	9	11			12												
Others.	1	2	3			3												
Total.	3	11	14			15												
Diseases of the Liver.																		
Total.	2	2	4			4												
Diseases of the Urinary System and Organs of Generation—																		
Bright's Disease, Nephritis, Uremia.		2				2												
Others.	1		1			1												
Total.	1	2	3			3												
Diseases of Parturition.																		
Total.																		
Violence.																		
Total.	3	1	4			4												
Ill-defined or not specified—																		
Debility, Atrophy, Inanition.	2		2			2												
Others.	1		1			1												
Total.	3		3			3												
All other Diseases not included in the above.																		
	1		1			1												
Grand Total.	45	44	89			91							181	177	358	2	4	6

PAARL, 1903.—Continued.

Diseases of the Nervous System—

Acute Inflammation of the Brain and its

Membranes.

Convulsions.

Others.

Total.

Diseases of the Circulatory System—

Heart Disease, Organic Degeneration,

Syncope.

Apoplexy.

Others.

Total.

Diseases of the Respiratory System—

Bronchitis.

Pneumonia, Inflammation, Congestion of

the Lungs, Pleurisy.

Others.

Total.

Diseases of the Alimentary Canal—

Enteritis, Gastro-Enteritis, Marasmus.

Others.

Total.

Diseases of the Liver.

Total.

Diseases of the Urinary System and Organs

of Generation—

Bright's Disease, Nephritis, Uremia.

Others.

Total.

Diseases of Parturition.

Total.

Violence.

Total.

Ill-defined or not specified—

Debility, Atrophy, Inanition.

Others.

Total.

All other Diseases not included in the above.

Grand Total.

ANNEXURE "A."  
TABLE 2.—Continued.  
Graaff-Reinet, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		Death Rate.	Death Rate.	Death Rate.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Estimated Population, middle of 1903 ..							3,971																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										















TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.										
	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.		
	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.		M.	F.	P.						
							Death Rate.															Death Rate.	
QUEENSTOWN, 1903.—Continued.																							
Diseases of the Nervous System—																							
Acute Inflammation of the Brain and its Membranes	1	1	2	..	..	..	2	0.50	2	..	1	..	..	..	..	..	3	0.19	3	..	..	0.33	
Convulsions	1	1	2	..	..	..	2	0.50	2	..	..	..	..	..	..	..	5	2.34	5	..	..	1.53	
Others	2	1	3	..	..	..	3	0.75	3	..	3	..	..	..	..	..	6	0.58	6	..	..	0.66	
Total	4	3	7	..	..	..	7	1.75	7	..	7	6	3	9	16	3.11	10	4	14	6	3	2.52	
Diseases of the Circulatory System—																							
Heart Disease, Organic Degeneration, Syncope	..	3	3	..	..	..	3	0.75	3	..	1	..	..	1	11	2.14	5	8	13	1	..	1.53	
Apoplexy	2	..	2	..	..	..	2	0.50	2	..	..	..	..	1	1	0.19	2	1	3	..	..	0.33	
Others	1	1	2	..	..	..	2	0.50	2	..	..	..	..	..	..	..	1	1	2	..	..	0.22	
Total	3	4	7	..	..	..	7	1.75	7	..	1	..	..	1	12	2.34	8	10	18	1	..	2.08	
Diseases of the Respiratory System—																							
Bronchitis	..	1	1	..	..	..	1	0.25	1	..	4	4	8	37	7.20	18	12	30	4	4	8	4.16	
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy	3	3	6	..	..	..	6	1.50	6	..	7	7	14	42	8.17	20	14	34	7	7	14	5.25	
Others	..	1	1	..	..	..	1	0.25	1	..	..	..	..	3	0.58	1	3	4	..	..	..	0.44	
Total	3	5	8	..	..	..	8	2.00	8	..	11	11	22	82	15.96	39	29	68	11	11	22	9.84	
Diseases of the Alimentary Canal—																							
Enteritis, Gastro-Enteritis, Marasmus	11	2	13	..	..	..	13	3.25	13	..	1	1	1	20	3.89	21	11	32	..	1	1	3.61	
Others	2	..	2	..	..	..	2	0.50	2	..	..	..	..	1	0.19	2	1	3	..	..	..	0.33	
Total	13	2	15	..	..	..	15	3.75	15	..	..	..	..	21	4.09	23	12	35	..	1	1	3.94	
Diseases of the Liver																							
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diseases of the Urinary System and Organs of Generation—																							
Bright's Disease, Nephritis, Uremia	..	1	1	..	..	..	1	0.25	1	..	..	..	..	1	0.19	..	2	2	..	..	..	0.22	
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0.19	..	..	..	..	1	1	0.11	
Total	..	1	1	..	..	..	1	0.25	1	..	..	..	..	2	0.39	..	2	2	..	1	1	0.33	
Diseases of Parturition																							
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Violence																							
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	1	2	3	..	..	..	3	0.75	3	..	..	..	..	2	0.39	2	3	5	..	..	..	0.55	
Ill-defined or not specified—																							
Debility, Atrophy, Inanition	..	..	..	..	..	..	..	0.25	..	..	1	1	2	4	0.78	1	1	2	1	1	2	0.44	
Others	..	..	..	..	..	..	..	..	3	..	6	1	..	7	1.36	3	3	6	1	1	2	0.87	
Total	..	..	..	..	..	..	1	0.25	4	..	8	2	1	11	2.14	4	4	8	2	2	4	1.31	
All other Diseases not included in the above																							
Grand Total..	51	32	83	..	1	1	84	20.97	116	106	222	44	40	84	306	59.54	167	138	305	44	41	85	12.65
Total.																							

ANNEXURE "A."  
TABLE 2.—Continued.  
Oudtshoorn, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths (b) Europeans or Coloured and (c) Males and Females.

Diseases.	EUROPEANS.										COLOURED.						ALL RACES.						Diseases.
	Certified.					Uncertified.					Total.		Certified.			Uncertified.			Total.				
	M.	F.	P.	M.	P.	M.	F.	P.	M.	P.	Death Rate.	M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.		
Estimated Population, middle of 1903 ..				3,995								4,502										8,497	
Diseases due to Specific Organisms—																							
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles ..	3	3	6	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Influenza ..	2	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diphtheria and Membranous Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cerebro-Spinal Meningitis ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Typhoid (Enteric) Fever, Simple Continued and Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Simple Cholera, Diarrhoea, Dysentery ..	8	3	11	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Tuberculosis, including Haemoptysis ..	7	6	13	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	21	14	35	4	2	6	41	10·26	51	63	114	19	24	43	157	72	77	149	23	26	49	198	
Parasitic Diseases—																							
Thrush, Stomatitis ..	..	1	1	..	..	..	1	0·25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	..	1	1	..	..	..	1	0·25	..	..	..	..	..	..	..	..	1	1	..	..	..	1	
Constitutional Diseases—																							
Cancer (Malignant Disease) ..	..	1	1	..	..	..	1	0·25	..	1	1	..	1	2	0·44	..	2	2	..	1	1	3	
Others ..	..	1	1	..	..	..	1	0·25	..	..	..	..	..	1	0·22	1	1	2	..	..	..	2	
Total ..	..	2	2	..	..	..	2	0·50	1	1	2	..	1	3	0·67	1	3	4	..	1	1	5	
Developmental Defects and Degeneration—																							
Premature Birth and Accidents during Birth ..	..	1	1	..	..	..	1	0·25	1	1	2	2	2	4	1·33	1	2	3	2	2	4	7	
Malformations ..	..	1	1	..	..	..	1	0·25	..	..	..	1	..	1	0·22	..	1	1	1	..	1	2	
Dentition ..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	0·22	1	1	1	..	..	..	1	
Old Age (Senile Decay) ..	..	2	2	..	..	..	2	0·50	1	2	3	..	..	..	0·67	1	4	5	..	..	..	5	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	..	4	4	..	..	..	4	1·00	3	3	6	3	2	5	2·44	3	7	10	3	2	5	15	



TABLE 2.—Continued.

Diseases.	EUROPEANS.										COLOURED.						ALL RACES.						Diseases.								
	Certified.			Uncertified.			Total.				Certified.			Uncertified.			Total.				Certified.			Uncertified.			Total.				
	M.	F.	P.	M.	F.	P.	M.	P.	Death Rate.	M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.		M.	F.	P.	M.	F.	P.	Death Rate.	
OUDTSHOORN, 1903.—Continued. Diseases of the Nervous System— Acute Inflammation of the Brain and its Membranes. Convulsions .. .. Others .. .. Total .. ..	1	1	1	1	1	1	1	1	0.25 0.50 0.50	1	1	1	1	1	1	1	1	1	0.22 3.11 0.22	1	1	1	1	1	1	1	1	1	0.24 1.88 0.35		
	1	3	4	1	1	1	1	1	1.25	4	2	6	6	4	10	5	5	10	3.55	5	5	10	7	4	11	21	2.47				
	1	1	1	1	1	1	1	1	0.25 0.75 0.25	2	1	3	1	1	1	4	1	4	0.89 0.22 ..	3	1	4	1	1	1	5	0.59 0.47 0.12				
	2	2	4	1	1	1	1	1	1.25	2	2	4	4	1	1	5	2	8	1.11	6	2	8	2	2	2	10	1.18				
	2	2	4	1	1	1	1	1	1.00	18	6	24	9	2	11	35	8	28	7.77	20	8	28	9	2	11	39	4.59				
Diseases of the Respiratory System— Bronchitis .. .. Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. .. Others .. .. Total .. ..	2	4	6	1	1	1	1	1	1.75 0.25	16	15	31	5	5	10	41	19	37	9.11 0.89	18	19	37	6	5	11	48	5.65 0.59				
	1	6	11	1	1	1	1	1	3.00	37	21	58	15	7	22	80	27	69	17.77	42	27	69	16	7	23	92	10.83				
	4	1	5	3	3	3	3	3	1.25 0.75	5	3	8	2	2	4	10	4	13	2.22 0.67	9	4	13	2	2	4	15	1.77 0.71				
	4	4	8	1	1	1	1	1	2.00	6	4	10	3	3	6	13	8	18	2.89	10	8	18	3	3	6	21	2.47				
	1	1	1	1	1	1	1	1	0.25	1	1	2	1	1	2	3	1	1	..	1	1	1	1	1	1	1	1	0.12			
Diseases of the Urinary System and Organs of Generation— Bright's Disease, Nephritis, Uremia Others .. .. Total .. ..	1	1	1	1	1	1	1	1	0.25	1	1	2	1	1	3	2	1	3	0.44 0.22	2	1	3	1	1	2	3	0.35 0.12				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
Diseases of Parturition Violence .. .. Total .. ..	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
Ill-defined or not specified— Debility, Atrophy, Inanition Others .. .. Total .. ..	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
	1	1	1	1	1	1	1	1	0.25	2	1	3	1	1	4	3	1	4	0.67	3	1	4	1	1	2	4	0.47				
All other Diseases not included in the above Grand Total.. ..	3	3	3	3	3	3	3	3	0.75	1	1	2	1	1	4	5	3	7	1.11	4	4	8	3	3	6	8	0.94				
	42	34	76	6	3	9	85	21.28	67.97	112	105	217	45	44	89	806	139	293	46.02	154	139	293	51	47	98	391	46.02				

ANNEXURE "A."  
TABLE 2.—*Continued*.  
Worcester, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths (b) Europeans or Coloured and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
Estimated Population, middle of 1903 ..				3,477						4,234			7,711					
Diseases due to Specific Organisms—																		
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever ..	1	..	1	..	..	1	..	..	..	..	..	..	1	..	1	..	..	0·13
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	1	1	2	1	1	2	..	3	4	1	1	0·78
Diphtheria and Membranous Croup ..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·13
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..
Typhoid (Enteric) Fever, Simple Continued ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, Typho-Malarial, Remittent Fever ..	1	2	3	..	..	3	1	1	2	1	1	2	2	3	5	1	1	0·91
and Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Pneumonia ..	..	..	..	..	..	..	7	5	12	5	3	8	9	5	14	6	4	3·11
Simple Cholera, Diarrhoea, Dysentery ..	2	..	2	1	1	2	..	..	..	..	..	..	..	..	..	..	..	24
Tuberculosis, including Haemoptysis ..	1	2	3	..	..	..	17	14	31	4	4	8	18	16	34	4	4	5·45
Erysipelas, Cellulitis, Pyæmia, Septicæmia, ..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	0·13
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	3	1	4	1	1	2	3	1	4	1	1	0·78
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	5	6	11	1	1	2	23	52	75	12	11	23	34	29	63	13	12	88
Total ..																		11·41
Parasitic Diseases—																		
Thrush, Stomatitis ..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	0·13
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1	1	1	..	..	1	..	..	..	..	..	..	1	..	1	..	..	0·13
Constitutional Diseases—																		
Cancer (Malignant Disease) ..	1	1	2	..	..	..	..	2	2	..	..	..	1	3	4	..	..	4
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1	1	2	..	..	2	..	2	2	..	..	..	1	3	4	..	..	4
Developmental Defects and Degeneration—																		
Premature Birth and Accidents during Birth ..	..	..	..	..	..	..	2	1	3	..	..	..	2	1	3	..	..	3
Malformations ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Dentition ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	0·13
Old Age (Senile Decay) ..	1	..	1	..	..	1	1	1	2	1	1	2	2	1	3	1	1	0·65
Others ..	1	1	1	..	..	1	..	..	..	..	..	..	1	..	1	..	..	0·13
Total ..	2	2	2	..	..	2	3	2	5	2	1	3	5	2	7	2	1	10
Total ..																		1·30

Diseases due to Specific Organisms—  
Small-pox.  
Chicken-pox.  
Measles.  
Rötheln.  
Scarlet Fever.  
Relapsing Fever.  
Influenza.  
Whooping Cough.  
Diphtheria and Membranous Croup.  
Cerebro-Spinal Fever.  
Cerebro-Spinal Meningitis.  
Typhoid (Enteric) Fever, Simple Continued  
Fever, Typho-Malarial, Remittent Fever  
and Fever.  
Epidemic Pneumonia.  
Simple Cholera, Diarrhoea, Dysentery.  
Tuberculosis, including Haemoptysis.  
Erysipelas, Cellulitis, Pyæmia, Septicæmia,  
and Hospital Gangrene.  
Puerperal Fever.  
Plague.  
Others.

Parasitic Diseases—  
Thrush, Stomatitis.  
From other Vegetable and Animal Parasites.

Constitutional Diseases—  
Cancer (Malignant Disease).  
Others.

Developmental Defects and Degeneration—  
Premature Birth, and Accidents during Birth.  
Malformations.  
Dentition.  
Old Age (Senile Decay).  
Others.



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
	Total.			Total.			Total.			Total.			Total.			Total.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.
WORCESTER, 1903.—Continued.																		
Diseases of the Nervous System—																		
Acute Inflammation of the Brain and its Membranes.	1	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others.	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	1	5	6	..	..	..	6	1	7	15	10	25	10	13	23	15	10	25
Death Rate.	..	..	..	..	..	..	9.92	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Circulatory System—																		
Heart Disease, Organic Degeneration, Syncope.	1	2	3	..	..	..	..	..	..	..	..	..	6	4	10	..	..	..
Apoplexy.	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..
Others.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	1	3	4	..	..	..	4	1	7	..	1	1	6	5	11	..	1	1
Death Rate.	..	..	..	..	..	..	1.89	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Respiratory System—																		
Bronchitis.	1	..	1	..	..	..	..	..	..	..	..	..	4	3	7	1	1	2
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.	2	..	2	..	..	..	2	10	24	2	3	5	16	10	26	2	3	5
Others.	1	..	1	..	..	..	1	..	1	..	1	1	2	..	2	..	1	1
Total.	4	..	4	..	..	..	18	13	31	3	5	8	22	13	35	3	5	8
Death Rate.	..	..	..	..	..	..	9.21	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Alimentary Canal—																		
Enteritis, Gastro-Enteritis, Marasmus.	3	4	7	..	1	1	6	14	20	..	2	2	9	18	27	..	3	3
Others.	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..
Total.	3	4	7	..	1	1	6	15	21	..	2	2	9	19	28	..	3	3
Death Rate.	..	..	..	..	..	..	5.43	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Liver.																		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	3	..	3	..	..	..	1	..	1	..	..	..	4	..	4	..	..	..
Death Rate.	..	..	..	..	..	..	0.24	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Urinary System and Organs of Generation—																		
Bright's Disease, Nephritis, Uræmia.	2	..	2	..	..	..	1	6	7	..	..	..	3	6	9	..	..	..
Others.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	2	..	2	..	..	..	1	6	7	..	..	..	3	6	9	..	..	..
Death Rate.	..	..	..	..	..	..	1.65	..	..	..	..	..	..	..	..	..	..	..
Diseases of Parturition.																		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	..	..	..	..	..	..	..	2	2	..	..	..	..	2	2	..	..	..
Death Rate.	..	..	..	..	..	..	0.47	..	..	..	..	..	..	..	..	..	..	..
Violence.																		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	1	..	1	..	..	..	4	2	6	..	..	..	5	2	7	..	..	..
Death Rate.	..	..	..	..	..	..	1.42	..	..	..	..	..	..	..	..	..	..	..
Ill-defined or not specified—																		
Debility, Atrophy, Inanition.	1	..	1	..	..	..	2	1	3	1	..	1	3	1	4	1	..	1
Others.	..	..	..	..	..	..	..	1	1	2	1	3	..	1	1	2	1	3
Total.	1	..	1	..	..	..	2	2	4	3	1	4	3	2	5	3	1	4
Death Rate.	..	..	..	..	..	..	1.89	..	..	..	..	..	..	..	..	..	..	..
All other Diseases not included in the above	..	..	..	..	..	1	1	1	5	1	1	2	3	2	5	1	2	3
Grand Total.	25	19	44	1	3	4	81	79	160	36	32	68	106	98	204	37	35	72
Grand Total.	..	..	..	..	..	..	228	53.85	..	..	..	..	276	35.79	..	..	..	..

WORCESTER, 1903.—Continued.

Diseases of the Nervous System—  
Acute Inflammation of the Brain and its Membranes.  
Convulsions.  
Others.  
Total.Diseases of the Circulatory System—  
Heart Disease, Organic Degeneration, Syncope.  
Apoplexy.  
Others.  
Total.Diseases of the Respiratory System—  
Bronchitis.  
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.  
Others.  
Total.Diseases of the Alimentary Canal—  
Enteritis, Gastro-Enteritis, Marasmus.  
Others.  
Total.Diseases of the Urinary System and Organs of Generation—  
Bright's Disease, Nephritis, Uræmia.  
Others.  
Total.Diseases of Parturition.  
Total.  
Violence.Ill-defined or not specified—  
Debility, Atrophy, Inanition.  
Others.  
Total.All other Diseases not included in the above  
Grand Total.

ANNEXURE. "A."  
TABLE 2.—Continued.  
Cradock, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903 and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths (b) Europeans or Coloured and (c) Males and Females.

Diseases.	EUROPEANS.					COLOURED.					ALL RACES.					Diseases.		
	Certified.		Uncertified.		Total.	Certified.		Uncertified.		Total.	Certified.		Uncertified.		Total.			
	M.	F.	P.	M.		F.	P.	M.	F.		P.	M.	F.	P.				
Estimated Population, middle of 1903 ..				2,956						4,555				7,511				
Diseases due to Specific Organisms—																		Diseases due to Specific Organisms—
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Small-pox.
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox.
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Measles.
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Rötheln.
Scarlet Fever ..	2	..	2	..	0·68	..	..	..	..	..	2	..	2	..	..	2	0·27	Scarlet Fever.
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Relapsing Fever.
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	Influenza.
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	Whooping Cough.
Diphtheria and Membranous Croup ..	1	1	2	..	0·68	..	..	..	..	..	..	..	..	..	..	1	0·13	Diphtheria and Membranous Croup.
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	0·40	Cerebro-Spinal Fever.
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Cerebro-Spinal Meningitis.
Typhoid (Enteric) Fever, Simple Continued ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Typhoid (Enteric) Fever, Simple Continued
Fever, Typho-Malarial, Remittent Fever ..	1	1	1	..	0·34	..	..	..	1	6	7	1	1	1	6	7	1·07	Fever, Typho-Malarial, Remittent Fever
and Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	and Fever.
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Epidemic Pneumonia.
Simple Cholera, Diarrhoea, Dysentery ..	1	1	1	..	0·34	..	..	..	..	21	36	4	6	21	15	36	5·59	Simple Cholera, Diarrhoea, Dysentery.
Tuberculosis, including Hamoptysis ..	8	1	9	..	3·38	4	1	5	2	5	7	24	26	2	6	8	4·53	Tuberculosis, including Hamoptysis.
Erysipelas, Cellulitis, Pyæmia, Septicæmia, ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Erysipelas, Cellulitis, Pyæmia, Septicæmia,
and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	and Hospital Gangrene.
Puerperal Fever ..	1	1	1	..	0·34	..	..	..	..	..	..	2	1	..	..	2	0·27	Puerperal Fever.
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	Plague.
Others ..	..	..	..	..	..	..	2	4	..	..	..	4	2	..	..	4	0·53	Others.
Total ..	11	5	16	..	5·75	15	13	28	26	27	53	81	44	26	28	98	13·05	Total.
Parasitic Diseases—																		Parasitic Diseases—
Thrush, Stomatitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Thrush, Stomatitis.
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	From other Vegetable and Animal Parasites
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Total.
Constitutional Diseases—																		Constitutional Diseases—
Cancer (Malignant Disease) ..	2	1	3	..	1·01	1	1	2	..	..	..	2	5	..	..	5	0·67	Cancer (Malignant Disease).
Others ..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2	0·27	Others.
Total ..	2	1	3	..	1·01	1	1	2	2	2	2	4	5	2	2	7	0·93	Total.
Developmental Defects and Degeneration—																		Developmental Defects and Degeneration—
Premature Birth, and Accidents during Birth ..	..	..	..	..	?	..	..	..	..	..	..	2	..	..	2	2	0·27	Premature Birth, and Accidents during Birth.
Malformations ..	..	2	2	..	0·68	..	..	..	..	2	2	2	2	..	2	2	0·40	Malformations.
Dentition ..	1	1	1	..	0·34	..	..	..	4	3	7	1	1	4	3	7	1·07	Dentition.
Old Age (Senile Decay) ..	1	..	1	..	0·34	..	1	1	1	1	2	3	1	1	1	2	0·53	Old Age (Senile Decay).
Others ..	..	..	..	..	..	..	1	1	..	..	..	1	1	..	..	1	0·13	Others.
Total ..	2	2	4	..	1·35	..	2	2	6	6	12	14	6	6	6	12	2·40	Total.



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.								
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.					
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.			
CRADOCK, 1903.—Continued.																					
Diseases of the Nervous System—																					
Acute Inflammation of the Brain and its Membranes.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Convulsions.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Others.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	1	3	4	2	..	2	2	2	4	12	10	22	3	5	8	14	10	24	32	4	26
Diseases of the Circulatory System—																					
Heart Disease, Organic Degeneration, Syncope.	6	7	13	1	..	1	5	..	5	1	1	2	11	7	18	2	1	3	21	2	80
Apoplexy.	..	..	..	..	..	..	1	1	1	..	..	..	..	1	1	..	..	..	1	0	13
Others.	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	0	13
Total.	7	7	14	1	..	1	5	1	6	1	1	2	12	8	20	2	1	3	23	3	06
Diseases of the Respiratory System—																					
Bronchitis.	1	2	3	1	..	1	1	1	2	21	8	29	2	3	5	22	8	30	35	4	66
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.	7	5	12	..	..	..	6	6	12	28	23	51	13	11	24	28	23	51	75	9	99
Others.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	8	7	15	1	..	1	7	7	14	49	31	80	15	14	29	50	31	81	110	14	65
Diseases of the Alimentary Canal—																					
Enteritis, Gastro-Enteritis, Marasmus.	8	9	17	..	..	..	2	8	10	1	3	4	10	17	27	1	3	4	31	4	13
Others.	2	..	2	..	..	..	..	2	2	1	1	2	2	2	4	1	1	2	6	0	80
Total.	10	9	19	..	..	..	2	10	12	2	4	6	12	19	31	2	4	6	37	4	93
Diseases of the Liver.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	..	..	..	1	0	13
Diseases of the Urinary System and Organs of Generation—																					
Bright's Disease, Nephritis, Uremia.	1	..	1	..	..	..	1	1	1	1	..	1	..	1	1	..	..	1	1	0	13
Others.	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	1	..	1	3	0	40
Total.	1	..	1	..	..	..	1	1	2	1	..	1	3	1	3	1	..	1	4	0	53
Diseases of Parturition.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	..	..	..	..	..	..	1	1	1	..	..	..	1	1	1	..	..	..	1	0	13
Violence.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	..	2	2	2	..	..	1	1	2	..	..	..	2	..	4	..	..	..	4	0	53
Ill-defined or not specified—																					
Debility, Atrophy, Inanition.	..	2	2	..	..	..	1	1	2	1	..	1	3	1	4	1	..	1	5	0	67
Others.	..	..	..	..	1	..	1	..	1	2	..	2	3	1	..	1	3	..	4	0	53
Total.	..	2	2	1	..	1	3	1	3	3	..	3	6	2	3	5	4	..	9	1	20
All other Diseases not included in the above	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	0	13
Grand Total..	42	38	80	5	1	6	38	40	78	102	79	181	259	80	78	158	107	80	345	45	93

CRADOCK, 1903.—Continued.

Diseases of the Nervous System—  
Acute Inflammation of the Brain and its Membranes.  
Convulsions.  
Others.

Total.

Diseases of the Circulatory System—  
Heart Disease, Organic Degeneration,  
Syncope.  
Apoplexy.  
Others.

Total.

Diseases of the Respiratory System—  
Bronchitis.  
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.  
Others.

Total.

Diseases of the Alimentary Canal—  
Enteritis, Gastro-Enteritis, Marasmus.  
Others.

Total.

Diseases of the Liver.

Total.

Diseases of the Urinary System and Organs of Generation—  
Bright's Disease, Nephritis, Uremia.  
Others.

Total.

Diseases of Parturition.

Total.

Violence.

Total.

Ill-defined or not specified—  
Debility, Atrophy, Inanition.  
Others.

Total.

All other Diseases not included in the above

Grand Total.

ANNEXURE "A."  
TABLE 2.—Continued.  
Beaufort West, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.		
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.					
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		Death Rate.	
Estimated Population, middle of 1903 ..				2,140						3,127						5,267					
Diseases due to Specific Organisms—																					
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·19	
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·76	
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·19	
Diphtheria and Membranous Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·38	
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Typhoid (Enteric) Fever, Simple Continued and Remittent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Fever, Typho-Malarial, Remittent Fever and Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·95	
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Simple Cholera, Diarrhoea, Dysentery ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4·75	
Tuberculosis, including Haemoptysis ..	17	2	19	..	..	..	17	22	39	7	12	19	58	18·55	34	24	58	7	12	77	14·62
Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
Total ..	17	8	25	..	1	1	21	33	54	16	22	38	92	29·42	38	41	79	16	23	118	22·40
Parasitic Diseases—																					
Thrush, Stomatitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Constitutional Diseases—																					
Cancer (Malignant Disease) ..	1	..	1	1	..	1	..	1	1	1	1	2	3	0·96	1	1	2	2	1	3	5
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1	..	1	1	..	1	..	1	1	1	1	2	3	0·96	1	1	2	2	1	3	5
Developmental Defects and Degeneration—																					
Premature Birth and Accidents during Birth ..	..	2	2	..	..	2	2	..	2	2	1	3	5	1·60	2	2	4	2	1	3	7
Malformations ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dentition ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Old Age (Senile Decay) ..	1	..	1	..	..	1	4	3	7	5	4	9	16	5·12	5	3	8	5	4	9	17
Others ..	..	..	..	..	..	..	..	..	..	..	..	1	1	0·32	..	..	..	..	1	1	1
Total ..	1	2	3	..	..	3	6	3	9	7	6	13	22	7·04	7	5	12	7	6	13	25





ANNEXURE "A."  
TABLE 2.—*Continued.*  
Aliwal North, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.					COLOURED.					ALL RACES.					Diseases.			
	Certified.		Uncertified.		Total.	Certified.		Uncertified.		Total.	Certified.		Uncertified.		Total.				
	M.	F.	P.	M.		F.	P.	M.	F.		P.	M.	F.	P.			M.	F.	P.
Estimated Population, middle of 1903 ..						1,697					3,546					5,243			
Diseases due to Specific Organisms—																			
Small-pox ..	..	..	..	..	..	..	2	2	4	..	..	4	1·13	..	..	..	4	0·76	Diseases due to Specific Organisms—
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Small-pox.
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox.
Rötheln ..	..	..	..	..	..	3	1·77	..	..	..	..	..	..	..	..	..	3	0·57	Measles.
Scarlet Fever ..	1	2	3	..	..	1	0·59	..	..	..	1	1	2	..	..	1	3	0·57	Rötheln.
Relapsing Fever ..	..	1	1	..	..	..	1	..	1	..	1	1	2	..	..	1	1	0·19	Scarlet Fever.
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Relapsing Fever.
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Influenza.
Diphtheria and Membranous Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Whooping Cough.
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria and Membranous Croup.
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Cerebro-Spinal Fever.
Typhoid (Enteric) Fever, Simple Continued and Fever ..	..	..	..	..	..	..	4	2	6	..	1	1	7	1·97	..	1	7	1·34	Cerebro-Spinal Meningitis.
Fever, Typho-Malarial, Remittent Fever ..	..	..	..	..	..	..	9	4	13	4	..	4	17	4·79	..	4	21	4·01	Typhoid (Enteric) Fever, Simple Continued and Fever.
Epidemic Pneumonia ..	1	3	4	..	..	4	2·36	..	..	..	..	..	17	3·10	..	..	16	3·05	Epidemic Pneumonia.
Simple Cholera Diarrhoea, Dysentery ..	5	..	5	..	..	5	2·95	6	5	11	..	..	11	..	..	..	..	..	Simple Cholera, Diarrhoea, Dysentery.
Tuberculosis, including Hemoptysis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Tuberculosis, including Hemoptysis.
Erysipelas, Cellulitis, Pyæmia Septicæmia, and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene.
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Puerperal Fever.
Plague ..	..	..	..	..	..	..	..	1	1	..	..	..	1	0·28	..	..	1	0·19	Plague.
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Others.
Total ..	7	6	13	..	13	7·66	23	14	37	4	2	6	43	12·13	30	20	50	56	Total.
Parasitic Diseases—																			Parasitic Diseases—
Thrush, Stomatitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Thrush, Stomatitis.
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	From other Vegetable and Animal Parasites
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Total.
Constitutional Diseases—																			Constitutional Diseases—
Cancer (Malignant Disease) ..	..	1	1	..	..	1	0·59	..	2	1	..	1	3	0·85	2	1	2	1	Cancer (Malignant Disease).
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	3	Others.
Total ..	..	1	1	..	..	1	0·59	2	2	1	1	1	3	0·85	2	1	3	4	Total.
Developmental Defects and Degeneration—																			Developmental Defects and Degeneration—
Premature Birth and Accidents during Birth ..	1	1	2	..	1	1·77	2	..	2	1	..	1	3	0·85	3	1	4	2	Premature Birth, and Accidents during Birth.
Malformations ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Malformations.
Dentition ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Dentition.
Old Age (Senile Decay) ..	..	..	..	..	..	..	1	3	4	1	2	3	7	1·97	1	3	4	3	Old Age (Senile Decay).
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Others.
Total ..	1	1	2	..	1	1·77	3	3	6	2	2	4	10	2·82	4	4	8	5	Total.



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.									
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.				Certified.			Uncertified.			Total.		
	M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.	M.		F.	P.	M.	F.	P.	Death Rate.			
ALI WAL NORTH, 1903.—Continued.																												
Diseases of the Nervous System—																												
Acute Inflammation of the Brain and its Membranes.																												
Convulsions .. .. .																												
Others .. .. .																												
Total .. .. .																												
Diseases of the Circulatory System—																												
Heart Disease, Organic Degeneration, Syncope.																												
Apoplexy .. .. .																												
Others .. .. .																												
Total .. .. .																												
Diseases of the Respiratory System—																												
Bronchitis .. .. .																												
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy .. .. .																												
Others .. .. .																												
Total .. .. .																												
Diseases of the Alimentary Canal—																												
Enteritis, Gastro-Enteritis, Marasmus.																												
Others .. .. .																												
Total .. .. .																												
Diseases of the Liver .. .. .																												
Total .. .. .																												
Diseases of the Urinary System and Organs of Generation—																												
Bright's Disease, Nephritis, Uremia .. .. .																												
Others .. .. .																												
Total .. .. .																												
Diseases of Parturition .. .. .																												
Total .. .. .																												
Violence .. .. .																												
Total .. .. .																												
Ill-defined or not specified—																												
Debility, Atrophy, Inanition.																												
Others .. .. .																												
Total .. .. .																												
All other Diseases not included in the above																												
Grand Total.. .. .																												

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases: distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.				COLOURED.				ALL RACES.			
	M.	F.	P.	Total.	M.	F.	P.	Total.	M.	F.	P.	Total.
Estimated Population, middle of 1903 ..												
Diseases due to Specific Organisms—												
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Membranous Croup ..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid (Enteric) Fever, Simple Continued ..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, Typho-Malarial, Remittent Fever ..	..	..	..	..	..	..	..	..	..	..	..	..
and Fever ..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..
Simple Cholera, Diarrhoea, Dysentery ..	2	1	3	6	3	3	3	9	5	1	6	12
Tuberculosis, including Hamoptysis ..	1	1	2	4	7	14	1	22	8	16	1	25
Erysipelas, Cellulitis, Pyæmia, Septicæmia, ..	..	..	..	..	..	..	..	..	..	..	..	..
and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	3	3	6	12	11	23	1	35	15	29	1	45
Parasitic Diseases—												
Thrush, Stomatitis ..	..	..	..	..	..	..	..	..	..	..	..	..
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..
Constitutional Diseases—												
Cancer (Malignant Disease) ..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..
Developmental Defects and Degeneration—												
Premature Birth and Accidents during Birth ..	1	3	4	8	1	..	1	2	2	5	2	7
Malformations ..	..	..	..	..	..	..	..	..	..	..	..	..
Dentition ..	..	..	..	..	..	..	..	..	..	..	..	..
Old Age (Senile Decay) ..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1	3	4	8	3	..	3	6	4	7	4	11









TABLE 2.—Continued.

Diseases.	EUROPEANS.										COLOURED.										ALL RACES.												
	Certified.					Uncertified.					Total.	Certified.					Uncertified.					Total.	Certified.					Uncertified.					Total.
	M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.		M.	F.	P.	M.	F.	P.	Death Rate.	M.	F.	P.		M.	F.	P.	Death Rate.							
STELLENBOSCH, 1903.—Continued.																																	
Diseases of the Nervous System—																																	
Acute Inflammation of the Brain and its Membranes.																																	
Convulsions.																																	
Others.																																	
Total.																																	
Diseases of the Circulatory System—																																	
Heart Disease, Organic Degeneration, Syncope.																																	
Apoplexy.																																	
Others.																																	
Total.																																	
Diseases of the Respiratory System—																																	
Bronchitis.																																	
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.																																	
Others.																																	
Total.																																	
Diseases of the Alimentary Canal—																																	
Enteritis, Gastro-Enteritis, Marasmus.																																	
Others.																																	
Total.																																	
Diseases of the Liver.																																	
Total.																																	
Diseases of the Urinary System and Organs of Generation—																																	
Bright's Disease, Nephritis, Uremia.																																	
Others.																																	
Total.																																	
Diseases of Parturition.																																	
Total.																																	
Violence.																																	
Total.																																	
Ill-defined or not specified—																																	
Debility, Atrophy, Inanition.																																	
Others.																																	
Total.																																	
All other Diseases not included in the above																																	
Grand Total.																																	





TABLE 2.—Continued.

Diseases.	EUROPEANS.							COLOURED.							ALL RACES.						
	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.
	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.	
WELLINGTON, 1903.—Continued.																					
Diseases of the Nervous System—																					
Acute Inflammation of the Brain and its Membranes.	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.21
Convulsions.	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.85
Others.	1	2	3	1	1	1	1.72	1	1	1	1	1	1	0.42	1	2	3	1	1	2	1.06
Total.	2	3	5	1	1	1	2.58	1	1	1	1	1	1	1.67	2	3	5	4	1	5	2.12
Diseases of the Circulatory System—																					
Heart Disease, Organic Degeneration, Syncope.	3	1	3	1	1	1	1.29	4	1	5	1	1	1	2.09	7	1	8	1	1	1	1.69
Apoplexy.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.69
Others.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.69
Total.	3	3	5	1	1	1	3.87	6	3	7	3	3	3	3.87	6	3	7	3	3	3	3.87
Diseases of the Respiratory System—																					
Bronchitis.	2	1	2	1	1	1	0.86	2	1	3	1	1	1	1.67	4	1	5	1	1	1	1.27
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.	1	1	1	1	1	1	1.29	10	6	16	1	1	1	6.68	10	6	16	1	1	1	3.39
Others.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Total.	2	2	3	1	1	1	3.44	12	7	19	1	1	1	8.34	12	7	19	1	1	1	4.66
Diseases of the Alimentary Canal—																					
Enteritis, Gastro-Enteritis, Marasmus.	1	2	3	1	1	1	1.29	3	4	7	1	1	1	3.34	4	6	10	1	1	1	2.33
Others.	1	1	1	1	1	1	0.86	1	1	1	1	1	1	0.42	1	1	1	1	1	1	0.21
Total.	1	2	3	1	1	1	2.15	3	5	8	1	1	1	3.75	4	7	11	1	1	1	2.54
Diseases of the Liver.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Total.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Diseases of the Urinary System and Organs of Generation.—																					
Bright's Disease, Nephritis, Uræmia.	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43
Others.	1	1	1	1	1	1	0.86	1	1	1	1	1	1	0.86	1	1	1	1	1	1	0.86
Total.	1	2	3	1	1	1	1.29	2	2	2	1	1	1	1.29	2	2	2	1	1	1	1.29
Diseases of Parturition.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Total.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Violence.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Total.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Ill-defined or not specified—																					
Debility, Atrophy, Inanition.	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43	1	1	1	1	1	1	1.06
Others.	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43	1	1	1	1	1	1	0.43
Total.	1	1	1	1	1	1	0.86	1	1	1	1	1	1	0.86	1	1	1	1	1	1	0.86
All other Diseases not included in the above.	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29	1	1	1	1	1	1	1.29
Grand Total..	15	16	31	2	2	4	35	35	26	61	14	4	18	79	50	42	92	16	6	22	114





TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.										
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.				Certified.			Uncertified.			Total.			
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.
MOSSEL BAY, 1903.—Continued.																													
Diseases of the Nervous System—																													
Acute Inflammation of the Brain and its Membranes.																													
Convulsions	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0.25
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	3.47
Total	1	..	1	..	..	..	2	2	4	0.63	2	4	7	4	11	3	7	4	11	16	3.97							1	0.25
Diseases of the Circulatory System—																													
Heart Disease, Organic Degeneration, Syncope.																													
Apoplexy	1	1	2	..	..	..	3	1	4	1.25	..	..	..	..	..	4	1.64	..	..	6	1.49							3	0.74
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							..	..
Total	2	2	4	..	..	..	3	2	5	2.50	3	4	7	4	11	5	2.05	..	..	9	2.23							..	..
Diseases of the Respiratory System—																													
Bronchitis.																													
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy	1	..	1	..	..	..	1	3	4	0.63	1	4	..	..	..	4	1.64	..	..	5	1.24							..	..
Others	2	2	4	..	..	..	4	6	10	2.50	4	1	1	..	1	11	4.52	6	1	15	3.72							1	0.25
Total	3	2	5	..	..	..	5	10	15	3.13	5	15	1	1	16	8	6.57	..	1	21	5.20							..	..
Diseases of the Alimentary Canal—																													
Enteritis, Gastro-Enteritis, Marasmus																													
Others	3	3	6	..	..	..	6	4	9	3.75	5	9	1	..	1	10	4.11	8	1	16	3.97							..	..
Total	3	3	6	..	..	..	6	4	9	3.75	5	9	1	..	1	10	4.11	8	1	16	3.97							..	..
Diseases of the Liver																													
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							..	..
Diseases of the Urinary System and Organs of Generation—																													
Bright's Disease, Nephritis, Uremia																													
Others	..	..	..	..	..	..	..	..	..	0.63	..	..	..	..	..	..	..	..	..	..	0.25							..	..
Total	1	..	1	..	..	..	..	..	..	0.63	..	..	..	..	..	1	..	..	..	1	0.25							..	..
Diseases of Parturition																													
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							..	..
Violence																													
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							..	..
Ill-defined or not specified—																													
Debility, Atrophy, Inanition																													
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.25							..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.25							..	..
All other Diseases not included in the above																													
Grand Total	17	15	32	..	2	2	35	35	70	21.25	35	70	20	17	37	107	43.94	52	102	141	34.94							3	0.74
All other Diseases not included in the above.																													
Grand Total.																													

ANNEXURE "A."

TABLE 2.—Continued.

Malmesbury, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.		M.	F.	P.	M.		F.		P.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Estimated Population, middle of 1903 ..																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																</

Diseases due to Specific Organisms—

Small-pox.

Chicken-pox.

Measles.

Rötheln.

Scarlet Fever.

Relapsing Fever.

Influenza.

Whooping Cough.

Diphtheria and Membranous Croup.

Cerebro-Spinal Fever.

Cerebro-Spinal Meningitis.

Typhoid (Enteric) Fever, Simple Continued

Fever, Typho-Malarial, Remittent Fever

and Fever.

Epidemic Pneumonia.

Simple Cholera, Diarrhoea, Dysentery.

Tuberculosis, including Haemoptysis.

Erysipelas, Cellulitis, Pyæmia, Septicæmia,

and Hospital Gangrene.

Puerperal Fever.

Plague.

Others.

Total.

Parasitic Diseases—

Thrush, Stomatitis.

From other Vegetable and Animal Parasites

Total.

Constitutional Diseases—

Cancer (Malignant Disease).

Others.

Total.

Developmental Defects and Degeneration—

Premature Birth, and Accidents during

Birth.

Malformations.

Dentition.

Old Age (Senile Decay).

Others.

Total.



TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.		
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
MALMESBURY, 1903.—Continued.																		
Diseases of the Nervous System—																		
Acute Inflammation of the Brain and its Membranes.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Circulatory System—																		
Heart Disease, Organic Degeneration, Syncope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Apoplexy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Respiratory System—																		
Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy	8	4	12	1	..	1	12	6	13	1	..	1	20	10	30	2	..	32
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	8	4	12	1	..	1	13	6	13	1	..	1	20	10	30	2	..	32
Diseases of the Alimentary Canal—																		
Enteritis, Gastro-Enteritis, Marasmus	1	1	2	..	..	..	2	1	3	1	..	1	4	2	5	1	..	6
Others	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1
Total	1	2	3	..	..	..	2	1	3	1	..	1	4	2	6	1	..	7
Diseases of the Liver	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Urinary System and Organs of Generation—																		
Bright's Disease, Nephritis, Uremia	1	..	1	..	..	..	..	1	1	..	..	..	1	..	2	..	..	2
Others	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	2	..	2	..	..	..	..	1	1	..	..	..	1	..	3	..	..	3
Diseases of Parturition	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Violence	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ill-defined or not specified—																		
Debility, Atrophy, Inanition	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
All other Diseases not included in the above	..	1	1	..	..	..	1	..	1	..	..	..	1	..	2	..	..	2
Grand Total..	20	15	35	2	1	3	46	27	73	9	2	11	84	46	108	11	3	122

MALMESBURY, 1903.—Continued.

Diseases of the Nervous System—  
Acute Inflammation of the Brain and its Membranes.  
Convulsions.  
Others.  
Total.

Diseases of the Circulatory System—  
Heart Disease, Organic Degeneration, Syncope.  
Apoplexy.  
Others.  
Total.

Diseases of the Respiratory System—  
Bronchitis.  
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy.  
Others.  
Total.

Diseases of the Alimentary Canal—  
Enteritis, Gastro-Enteritis, Marasmus.  
Others.  
Total.

Diseases of the Liver.  
Total.

Diseases of the Urinary System and Organs of Generation—  
Bright's Disease, Nephritis, Uremia.  
Others.  
Total.

Diseases of Parturition.  
Total.  
Violence.

Ill-defined or not specified—  
Debility, Atrophy, Inanition.  
Others.  
Total.

All other Diseases not included in the above  
Grand Total.





TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.	Certified.			Uncertified.			Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	M.	F.	P.	M.	F.	P.		M.	F.	P.	M.	F.	P.		M.	F.	P.	M.		F.		P.	Death Rate.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
GEORGE, 1903.—Continued.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

All other Diseases not included in the above.

Grand Total.





TABLE 2.—Continued.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.					
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.				Total.				
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		M.	F.	P.	Death Rate.	
ROBERTSON, 1903.—Continued.																								
Diseases of the Nervous System—																								
Acute Inflammation of the Brain and its Membranes.																								
Convulsions	2	..	2	3	1	..	..	..	..	2	..	3	1	2	..	..	..	..	3	2	2	5	1.58	
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2.21	
Total	3	2	5	1	1	..	1	6	3.01	2	2	4	2	2	..	2	6	5.11	5	4	9	3	3.79	
Diseases of the Circulatory System—																								
Heart Disease, Organic Degeneration, Syncope.																								
Apoplexy	2	1	3	..	..	..	3	1.50	..	1	3	4	..	..	..	4	3.40	3	4	7	..	7	2.21	
Others	..	1	1	..	..	..	1	0.50	..	..	..	..	..	..	..	..	..	..	1	1	..	..	0.32	
Total	2	2	4	..	..	..	4	2.01	..	1	3	4	..	..	..	4	3.40	3	5	8	..	8	2.52	
Diseases of the Respiratory System—																								
Bronchitis.																								
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy	..	..	..	..	1	1	1	0.50	..	2	3	5	..	2	2	7	5.96	2	3	5	3	8	2.52	
Others	1	1	2	..	..	..	2	1.00	..	2	3	5	..	..	..	5	4.26	3	4	7	..	7	2.21	
Total	1	1	2	..	1	1	3	1.50	..	4	6	10	..	2	2	12	10.21	5	7	12	3	15	4.73	
Diseases of the Alimentary Canal—																								
Enteritis, Gastro-Enteritis, Marasmus.																								
Others	..	3	3	..	..	..	3	1.50	..	6	..	6	..	..	..	6	5.11	6	3	9	..	9	2.84	
Total	..	4	4	..	..	..	4	2.01	..	6	..	6	..	..	..	6	5.11	6	4	10	..	10	3.15	
Diseases of the Liver.																								
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diseases of the Urinary System and Organs of Generation—																								
Bright's Disease, Nephritis, Uremia.																								
Others	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	0.85	1	..	1	..	..	0.32	
Total	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	2	1.70	2	..	2	..	2	0.63	
Diseases of Parturition.																								
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Violence.																								
Total	..	1	1	..	..	..	1	0.50	..	..	..	..	..	..	..	..	..	..	1	1	..	1	0.32	
Ill-defined or not specified—																								
Debility, Atrophy, Inanition.																								
Others	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.85	..	..	..	..	1	0.32	
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0.85	..	..	..	..	1	0.32	
All other Diseases not included in the above.																								
Grand Total..	12	20	32	1	1	2	34	17.04	23	23	46	4	3	7	53	45.11	35	43	78	5	4	9	87	27.44





TABLE 2.—Continued.

Diseases	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.	
	Certified.			Uncertified.			Certified.			Uncertified.			Certified.			Uncertified.				Total.
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	Death Rate.				
BURGHESDORP, 1903.—Continued.																				
Diseases of the Nervous System—																				
Acute Inflammation of the Brain and its Membranes.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·07	
Convulsions ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·07	
Diseases of the Circulatory System—																				
Heart Disease, Organic Degeneration, Syncope ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·71	
Apoplexy ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·36	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·07	
Diseases of the Respiratory System—																				
Bronchitis ..	1	..	1	1	..	1	2	1·60	..	1	1	4	2	6	7	4·47	1	1	2	
Pneumonia, Inflammation, Congestion of the Lungs, Pleurisy ..	5	2	7	..	..	..	7	5·60	10	1	11	3	2	5	16	10·22	15	3	23	
Others ..	1	..	1	..	..	..	1	0·80	..	..	..	..	..	..	..	..	1	..	1	
Total ..	7	2	9	1	..	1	10	8·00	10	2	12	7	4	11	23	14·69	17	4	33	
Diseases of the Alimentary Canal—																				
Enteritis, Gastro-Enteritis, Marasmus ..	2	2	4	..	..	..	4	3·20	3	..	3	1	1	2	5	3·19	5	2	9	
Others ..	1	..	1	..	..	..	1	0·80	2	1	3	..	..	..	3	1·92	3	1	4	
Total ..	3	2	5	..	..	..	5	4·00	5	1	6	1	1	2	8	5·11	8	3	13	
Diseases of the Liver ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	1	..	1	..	..	..	1	0·80	..	..	..	..	..	..	..	..	1	..	1	
Diseases of the Urinary System and Organs of Generation—																				
Bright's Disease, Nephritis, Uremia ..	3	..	3	..	..	..	3	2·40	..	1	1	..	..	..	1	0·64	3	1	4	
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0·64	..	..	..	
Total ..	3	..	3	..	..	..	3	2·40	..	1	1	1	1	1	2	1·28	3	1	4	
Diseases of Parturition ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Violence ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	2	1·28	2	..	2	
Ill-defined or not specified—																				
Debility, Atrophy, Inanition ..	..	..	..	..	..	..	..	..	..	..	..	4	1	5	5	3·19	..	..	5	
Others ..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	0·64	..	..	1	
Total ..	..	..	..	..	..	..	..	..	..	..	..	5	1	6	6	3·83	..	..	6	
All other Diseases not included in the above	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Grand Total..	19	6	25	4	1	5	30	24·00	33	13	46	25	20	45	91	58·11	52	19	42·97	

All other Diseases not included in the above.

## ANNEXURE "A."

TABLE 2.—Continued.

Swellendam, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population, from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.						COLOURED.						ALL RACES.						Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Certified.			Uncertified.			Total.			Certified.			Uncertified.			Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		Death Rate.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Estimated Population, middle of 1903 ..							1,111									1,249				2,360																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										





ANNEXURE "A."  
TABLE 2.—Continued.  
Prince Albert, 1903.

TABLE showing in regard to each of the Thirty-five Chief Towns of the Colony the number of deaths registered for the year 1903, and the rate of mortality per 1,000 of their respective estimated population, from certain specified diseases and from all other diseases; distinguishing between (a) Certified and Uncertified Deaths, (b) Europeans and Coloured, and (c) Males and Females.

Diseases.	EUROPEANS.					COLOURED.					ALL RACES.					Diseases.				
	Certified.			Uncertified.		Total.	Certified.			Uncertified.		Total.	Certified.				Uncertified.		Total.	
	M.	F.	P.	M.	F.		P.	M.	F.	P.	M.		F.	P.	M.		F.	P.		
Estimated Population, middle of 1903 ..				1,006																
Diseases due to Specific Organisms—																				
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rötheln ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Membranous Croup ..	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid (Enteric) Fever, Simple Continued and Remittent Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever, Typho-Malarial, Remittent Fever and Fever ..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Simple Cholera, Diarrhoea, Dysentery ..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis, including Haemoptysis ..	1	1	2	..	..	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas, Cellulitis, Pyæmia, Septicæmia, and Hospital Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	5	4	9	..	8·95	4	8	12	..	13	9	12	21	1	1	22	12·54	..	..	..
Parasitic Diseases—																				
Thrush, Stomatitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
From other Vegetable and Animal Parasites ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Constitutional Diseases—																				
Cancer (Malignant Disease) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Developmental Defects and Degeneration—																				
Premature Birth and Accidents during Birth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malformations ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dentition ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Old Age (Senile Decay) ..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	3	..	3	1	3·98	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..



TABLE 2.—Continued.

[illegible]

## ANNEXURE "A."

TABLE NO. 3.

TABLE showing for each of the Thirty-five Chief Towns of the Colony the number of Deaths registered for the

DISEASES.			0 day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years.		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.
Cape Town	...	...	E 15 C 53	13 46	21 89	25 91	26 102	28 82	20 66	17 73	4 20	3 25	3 17	5 9	2 6	2 11	91 353	93 337	184 690	4 11	7 11	3 9	4 15
Total	...	...	68	59	110	116	128	110	86	90	24	28	20	14	8	13	444	430	874	15	18	12	19
Suburban Municipalities	...	...	E 42 C 67	24 58	54 89	56 114	55 81	42 100	46 94	38 102	8 38	9 53	6 17	4 13	1 6	5 10	212 392	178 450	390 842	12 24	7 37	5 14	3 12
Total	...	...	109	82	143	170	136	142	140	140	46	62	23	17	7	15	604	628	1232	36	44	19	15
Green Point and Sea Point	...	...	E 4 C ...	1 2	6 ...	1 1	2 2	5 ...	2 ...	1 ...	...	...	...	...	...	...	14 2	8 4	22 6	1 1	1 1	...	...
Total	...	...	4	3	6	2	4	5	2	1	...	...	...	1	...	...	16	12	28	2	2	...	...
Simon's Town and Kalk Bay- Muizenberg	...	...	E 1 C 6	3 6	6 3	3 7	8 8	3 5	2 6	2 4	...	...	1 1	...	...	...	18 27	11 28	29 55	...	...	...	...
Total	...	...	7	9	9	10	16	8	8	6	3	5	2	...	...	1	45	39	84	...	3	1	4
Kimberley	...	...	E 13 C 12	11 18	10 46	11 32	7 31	14 38	2 32	5 38	...	3 9	1 4	...	...	2 3	33 133	46 140	79 273	2 9	2 7	3 8	1 4
Total	...	...	25	29	56	43	38	52	34	43	6	12	5	2	2	5	166	186	352	11	9	11	5
Beaconsfield	...	...	E ... C 20	3 16	8 28	1 25	4 33	2 22	2 17	...	...	...	...	...	...	...	14 115	6 95	20 210	...	...	...	...
Total	...	...	20	19	36	26	37	24	19	14	9	12	5	1	3	5	129	101	230	9	6	4	5
Port Elizabeth	...	...	E 15 C 33	12 32	29 28	18 37	18 35	12 34	8 36	12 16	3 12	4 9	3 4	1 5	...	...	81 148	59 139	140 287	6 12	3 9	2 6	5 6
Total	...	...	48	44	57	55	53	46	44	28	15	13	7	6	5	6	229	198	427	18	12	8	11
East London	...	...	E 11 C 6	12 17	17 12	11 15	4 15	13 16	4 14	4 11	3 8	2 3	1 2	1 4	...	...	40 58	44 66	84 124	2 1	1 1	2 ...	2 3
Total	...	...	17	29	29	26	19	29	18	15	11	5	3	5	1	1	98	110	208	3	2	2	5
Grahamstown	...	...	E 3 C 14	3 10	6 15	8 13	7 27	4 27	4 27	3 23	1 17	...	...	...	...	...	21 110	18 97	39 207	2 3	...	4 7	2 7
Total	...	...	17	13	21	21	34	31	31	26	18	12	6	6	4	6	131	115	246	5	2	11	9
Uitenhage	...	...	E 2 C 12	3 9	6 18	3 12	6 13	6 13	3 15	4 18	1 10	2 ...	...	...	1 2	...	19 72	18 59	37 131	2 5	...	1 4	1 7
Total	...	...	14	12	24	15	19	19	18	22	11	2	2	2	3	5	91	77	168	7	6	5	8
Paarl	...	...	E 2 C 18	2 16	6 17	8 14	4 8	5 17	4 13	5 20	...	1 7	1 6	...	...	1 1	17 66	22 82	39 148	3 6	1 3	1 2	1 5
Total	...	...	20	18	23	22	12	22	17	25	3	8	7	2	1	7	83	104	187	9	4	3	6
Graaff-Reinet	...	...	E 1 C 16	3 17	6 21	12 15	2 17	5 13	3 13	1 18	2 ...	1 2	...	...	1 ...	...	15 68	22 66	37 134	1 6	...	1 2	1 1
Total	...	...	17	20	27	27	19	18	16	19	2	3	1	1	1	...	83	88	171	7	2	3	2
King William's Town	...	...	E 2 C 9	6 2	4 7	3 8	3 9	5 6	2 6	2 3	1 2	1 3	3 ...	1 1	...	...	15 34	18 24	33 58	...	2 3	...	1 2
Total	...	...	11	8	11	11	12	11	8	5	3	4	3	2	1	1	49	42	91	2	5	1	3
Queenstown	...	...	E ... C 17	4 15	8 19	3 15	6 30	5 27	3 37	...	1 8	1 14	1 4	...	1 3	1 1	20 118	14 100	34 218	1 2	...	...	1 2
Total	...	...	17	19	27	18	36	32	40	19	9	15	5	9	4	2	138	114	252	3	2	1	3
Oudtshoorn	...	...	E 2 C 20	3 7	7 22	1 32	7 27	11 21	6 28	6 19	3 16	1 9	...	1 5	...	...	25 114	23 97	48 211	3 2	...	1 7	...
Total	...	...	22	10	29	33	34	32	34	25	19	10	...	6	1	4	139	120	259	5	7	5	3



## ANNEXURE "A."—Continued.

TABLE NO. 3.—Continued.

Year 1903, at each age period, distinguishing between (a) Europeans and Coloured, and (b) Males and Females.

15—		20—		25—		30—		35—		45—		55—		65—		75—		85 up.		TOTAL OVER 5 YEARS.			Unspeci- fied.		ALL AGES.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per sons	M.	F.	M.	F.	Per- sons	
7 15	2 17	22 31	9 21	27 58	8 24	34 50	6 24	61 74	17 40	66 47	27 23	44 35	15 19	30 24	15 17	17 11	14 22	2 7	3 9	317 372	127 242	444 614	...	...	408 726	220 579	628 1305	} E C
22	19	53	30	85	32	84	30	135	57	113	50	79	34	54	32	28	36	9	12	689	369	1058	1	...	1134	799	1933	
13 10	9 22	21 27	4 25	25 30	11 28	18 30	13 9	34 41	24 26	42 30	27 31	30 24	22 13	30 18	21 17	11 15	9 12	7 4	8 13	248 267	158 245	406 512	...	...	460 659	336 695	796 1354	} E C
23	31	48	29	55	39	48	22	75	50	72	58	54	35	48	38	26	21	11	21	515	403	918	...	...	1119	1031	2150	
2 ...	1 ...	2 1	...	2 2	...	1 ...	...	3 1	3 2	5 1	6 1	6 ...	6 1	4 ...	1 ...	2 1	2 ...	...	...	28 7	20 5	48 12	...	...	42 9	28 9	70 18	} E C
2	1	3	...	4	...	1	...	4	5	6	7	6	7	4	1	3	2	...	...	35	25	60	...	...	51	37	88	
1 2	...	1 9	1 ...	6 6	...	3 7	...	10 4	3 3	3 2	1 ...	6 9	1 1	2 ...	1 3	1 2	...	...	...	33 42	7 25	40 67	...	...	51 69	18 53	69 122	} E C
3	...	10	1	12	3	10	4	13	7	5	1	15	2	2	4	3	1	1	2	75	32	107	...	...	120	71	191	
1 23	3 8	5 72	7 3	14 108	3 15	9 84	9 19	20 120	6 26	15 46	6 16	9 22	6 11	7 4	3 5	1 3	3 4	2 2	1 2	88 501	50 120	138 621	...	...	121 635	96 260	217 895	} E C
24	11	77	10	122	18	92	28	140	32	61	22	31	17	11	8	4	7	4	3	589	170	759	1	...	756	356	1112	
...	1 7	1 9	2 17	...	...	...	...	6 44	2 24	3 30	2 9	2 9	...	1 3	...	1 2	4 1	...	...	14 164	11 94	25 258	...	...	28 279	17 189	45 468	} E C
7	10	18	6	17	8	21	17	50	26	33	11	11	7	4	4	3	5	1	...	178	105	283	...	...	307	206	513	
8 14	4 6	10 22	4 20	12 40	6 13	12 32	2 18	19 46	7 23	21 22	7 14	18 17	6 10	13 9	9 6	10 5	10 4	1 ...	2 3	132 225	65 132	197 357	...	...	213 374	124 271	337 645	} E C
22	10	32	24	52	19	44	20	65	30	43	21	35	16	22	15	15	14	1	5	357	197	554	1	...	587	395	982	
3 13	...	3 2	4 4	10 10	...	8 12	2 6	9 18	1 4	11 5	3 4	11 6	4 1	5 1	5 ...	4 1	1 2	2 ...	1 ...	70 73	24 35	94 108	1 11	...	111 142	68 103	179 245	} E C
16	2	9	8	20	8	20	8	27	5	16	7	17	5	6	5	5	3	2	1	143	59	202	12	2	253	171	424	
...	1 3	2 5	1 6	2 5	3 4	3 9	4 8	7 6	2 10	10 13	3 3	4 3	4 1	12 5	5 5	3 4	6 8	...	3 2	49 64	34 61	83 125	...	...	70 174	52 158	122 332	} E C
3	6	5	7	7	7	12	12	13	12	23	6	7	5	17	10	7	14	3	5	113	95	208	...	...	244	210	454	
2 6	1 2	...	1 5	1 3	1 5	...	...	3 8	2 12	7 13	3 9	4 10	2 4	2 11	4 2	2 5	2 5	...	2 4	24 80	19 66	43 146	...	...	43 153	37 125	80 278	} E C
8	3	6	6	4	6	6	5	11	14	20	12	14	6	13	6	7	7	3	6	104	85	189	1	...	196	162	358	
1 6	2 5	...	1 5	1 6	...	1 10	1 1	5 10	1 3	7 8	8 6	3 8	3 6	5 7	2 11	1 5	4 3	...	...	28 72	24 53	52 125	...	...	45 138	46 135	91 273	} E C
7	7	1	6	7	3	11	2	15	4	15	14	11	9	12	13	6	7	3	2	100	77	177	...	...	183	181	364	
1 2	3 7	...	...	...	1 10	...	1 2	3 6	2 4	2 9	...	3 6	1 4	3 3	2 1	4 6	4 4	...	...	18 49	15 56	33 105	...	...	33 117	37 122	70 239	} E C
3	10	5	4	2	11	2	7	7	11	10	6	9	5	6	3	10	8	3	2	67	71	138	...	...	150	159	309	
3 1	3 1	3 ...	2 1	4 ...	4 2	4 5	3 ...	5 4	2 6	2 6	1 3	5 1	1 1	5 1	1 3	4 1	4 ...	...	1 ...	35 23	25 22	60 45	...	...	50 57	43 46	93 103	} E C
4	4	3	3	4	6	9	3	9	8	8	4	6	2	6	4	5	4	1	1	58	47	105	...	...	107	89	196	
1 3	1 5	6 2	2 5	4 6	2 6	3 6	1 3	4 5	2 8	3 8	2 8	2 3	1 1	3 3	2 4	3 3	3 2	1 ..	2 ...	31 42	19 46	50 88	...	...	51 160	33 146	84 306	} E C
4	6	8	7	10	8	9	4	9	10	11	10	5	2	6	6	6	5	1	2	73	65	138	...	...	211	179	390	
1 1	1 9	5 4	...	...	...	...	1 2	3 5	2 3	4 1	2 3	3 3	4 3	1 12	1 2	2 3	3 1	...	...	23 43	14 52	37 95	...	...	48 157	37 149	85 306	} E C
2	10	9	12	7	5	1	3	8	5	5	5	6	7	13	3	5	4	...	2	66	66	132	...	...	205	186	391	

## ANNEXURE "A."—Continued.

TABLE NO. 3.—Continued.

DISEASES.				0 day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years.		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—	
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.
Worcester	...	...	...	E 2	1	1	3	7	3	1	3	1	...	...	...	...	...	12	10	22	...	1	...	3
				C 18	13	20	15	8	22	10	13	2	2	5	2	...	1	63	68	131	5	4	...	3
Total	...	...	...	20	14	21	18	15	25	11	16	3	2	5	2	...	1	75	78	153	5	5	...	6
Craddock	...	...	...	E 4	2	6	5	4	7	1	4	3	1	...	...	2	...	20	19	39	3	1	...	2
				C 11	9	21	13	15	16	17	15	5	6	1	1	...	3	70	63	133	1	4	3	4
Total	...	...	...	15	11	27	18	19	23	18	19	8	7	1	1	2	3	90	82	172	4	5	3	6
Beaufort West	...	...	...	E 1	6	4	5	5	2	2	3	...	...	1	...	...	...	13	16	29	...	3	...	1
				C 12	9	14	10	13	10	9	14	4	4	2	2	1	1	55	50	105	7	5	4	5
Total	...	...	...	13	15	18	15	18	12	11	17	4	4	3	2	1	1	68	66	134	7	8	4	6
Aliwal North	...	...	...	E 2	2	2	2	2	5	...	2	...	...	...	...	1	1	7	12	19	...	2	...	...
				C 5	3	12	13	8	10	6	4	5	2	2	...	1	...	39	32	71	2	1	3	3
Total	...	...	...	7	5	14	15	10	15	6	6	5	2	2	...	2	1	46	44	90	2	3	3	3
Somerset East	...	...	...	E 3	3	2	2	2	1	1	1	...	...	...	1	...	...	8	8	16	1	...	1	1
				C 9	4	7	6	8	2	4	3	3	2	...	2	1	...	32	19	51	3	4	1	1
Total	...	...	...	12	7	9	8	10	3	5	4	3	2	...	3	1	...	40	27	67	4	4	2	2
Stellenbosch	...	...	...	E ...	...	1	2	3	...	1	1	1	1	...	1	...	...	6	5	11	...	...	...	...
				C 10	5	14	4	12	10	9	6	2	5	4	2	1	1	52	33	85	1	1	3	2
Total	...	...	...	10	5	15	6	15	10	10	7	3	6	4	3	1	1	58	38	96	1	1	3	2
Wellington	...	...	...	E 2	1	3	2	3	3	1	1	...	...	1	...	...	...	10	7	17	...	2	...	...
				C 5	2	7	4	5	4	7	3	2	...	2	2	...	...	28	15	43	1	1	...	2
Total	...	...	...	7	3	10	6	8	7	8	4	2	...	3	2	...	...	38	22	60	1	3	...	2
Mossel Bay	...	...	...	E 1	2	3	3	3	2	...	1	...	2	1	...	1	...	9	10	19	...	1	...	...
				C 5	6	15	13	7	4	9	5	4	4	1	...	1	2	42	34	76	5	1	3	...
Total	...	...	...	6	8	18	16	10	6	9	6	4	6	2	...	2	2	51	44	95	5	2	3	...
Malmesbury	...	...	...	E ...	...	4	...	1	2	...	...	...	...	1	...	...	...	6	2	8	2	...	...	2
				C 3	4	4	2	7	7	7	4	4	...	...	...	...	1	25	18	43	7	2	2	1
Total	...	...	...	3	4	8	2	8	9	7	4	4	...	1	...	...	1	31	20	51	9	2	2	3
George	...	...	...	E ...	3	2	...	2	2	1	2	1	...	...	...	...	...	6	7	13	1	...	1	...
				C 2	4	3	2	5	4	7	3	...	2	1	2	1	2	19	19	38	6	5	...	...
Total	...	...	...	2	7	5	2	7	6	8	5	1	2	1	2	1	2	25	26	51	7	5	1	...
Robertson	...	...	...	E 2	1	...	2	1	2	1	1	...	2	...	1	1	...	5	9	14	1	...	...	1
				C 6	...	3	3	...	3	2	6	4	1	...	...	...	...	15	13	28	2	...	1	3
Total	...	...	...	8	1	3	5	1	5	3	7	4	3	...	1	1	...	20	22	42	3	...	1	4
Burghersdorp	...	...	...	E 1	...	5	...	1	2	2	...	...	...	...	...	...	...	9	2	11	...	...	...	...
				C 7	6	8	4	5	4	5	4	2	1	...	...	1	...	28	19	47	2	2	...	1
Total	...	...	...	8	6	13	4	6	6	7	4	2	1	...	...	1	...	37	21	58	2	2	...	1
Swellendam	...	...	...	E 1	..	1	3	...	...	...	...	...	...	...	1	...	...	2	4	6	...	...	...	1
				C 2	4	3	1	1	2	...	...	1	1	1	2	...	...	8	10	18	...	1	...	...
Total	...	...	...	3	4	4	4	1	2	...	...	1	1	1	3	...	...	10	14	24	...	1	...	1
Prince Albert	...	...	...	E 4	...	5	...	1	...	...	...	1	1	1	...	1	1	13	2	15	...	...	...	...
				C 1	3	1	1	...	2	2	3	1	1	1	...	...	...	6	10	16	1	1	...	1
Total	...	...	...	5	3	6	1	1	2	2	3	2	2	2	...	1	1	19	12	31	1	1	...	1
Total	...	...	...	E 136	124	233	193	194	191	122	119	34	35	25	17	17	14	761	693	1454	47	34	25	33
				C 399	343	546	522	532	521	498	461	191	194	89	76	37	70	2292	2187	4479	136	132	83	102
Grand total	...	...	...	535	467	779	715	726	712	620	580	225	229	114	93	54	84	3053	2880	5933	183	166	108	135



ANNEXURE "A."—Continued.

TABLE NO. 3.—Continued.

15—		20—		25—		30—		35—		45—		55—		65—		75—		85 up.		TOTAL OVER 5 YEARS.			Unspeci- fied.		ALL AGES			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.	Per- sons	
...	1	...	...	...	...	...	...	2	1	...	1	5	2	3	3	2	...	2	...	11	12	26	...	...	26	22	48	E C
4	3	2	3	4	3	7	1	6	3	10	6	8	6	5	1	3	1	...	3	54	43	97	...	...	117	111	228	
4	4	2	3	4	3	7	4	8	4	10	7	13	8	8	7	5	1	2	3	68	55	123	...	...	143	133	276	
...	1	3	1	4	2	...	3	6	1	3	3	5	2	2	...	1	1	...	...	27	20	47	...	...	47	39	86	E C
9	4	7	2	1	10	5	1	10	6	11	8	11	3	7	5	3	4	2	2	70	56	126	...	...	140	119	259	
9	5	10	6	5	12	5	7	16	7	14	11	16	5	9	5	4	5	2	2	97	76	173	...	...	187	158	345	
1	3	6	...	3	2	2	1	4	2	...	1	5	2	...	2	1	...	...	...	22	17	39	...	...	35	33	68	E C
1	8	3	5	3	2	1	7	8	7	8	8	5	10	5	13	5	4	4	...	73	66	139	...	...	128	116	244	
5	11	9	5	6	4	3	8	12	9	8	9	13	7	10	7	14	5	4	4	95	83	178	...	...	163	149	312	
1	...	...	...	2	1	3	...	1	...	2	...	2	1	3	1	1	...	...	...	15	5	20	...	...	22	17	39	E C
1	3	5	3	3	1	1	1	3	3	3	1	5	3	1	2	2	1	2	4	37	29	66	...	...	76	61	137	
5	3	5	3	5	2	7	1	4	3	5	4	7	4	4	3	3	1	2	4	52	34	86	...	...	98	78	176	
...	...	...	1	1	1	1	...	1	4	2	2	...	...	...	1	1	1	...	...	8	11	19	...	...	16	19	35	E C
1	1	3	5	3	4	1	2	3	7	1	1	2	3	3	3	2	2	1	...	30	36	66	...	...	62	55	117	
1	4	3	6	4	5	5	2	4	11	6	3	2	3	3	4	3	3	1	...	38	47	85	...	...	78	74	152	
1	1	...	...	...	...	...	1	1	1	...	...	1	2	...	4	2	5	...	2	5	16	21	...	...	11	21	32	E C
2	3	2	2	3	3	3	...	5	2	6	2	3	1	5	3	1	2	1	2	38	26	64	...	...	90	59	149	
3	4	2	2	3	3	3	1	6	3	6	2	4	6	5	7	6	7	1	4	43	42	85	...	...	101	80	181	
...	1	...	...	...	1	...	...	...	...	1	3	1	1	2	2	2	...	1	1	7	11	18	...	...	17	18	35	E C
3	...	...	3	...	...	...	1	3	2	5	1	2	1	3	...	3	1	1	...	21	15	36	...	...	49	30	79	
3	1	...	3	...	1	...	1	3	2	6	7	3	2	5	2	5	1	2	1	28	26	54	...	...	66	48	114	
...	1	2	...	...	2	...	...	1	2	...	...	1	...	2	1	2	...	...	...	8	7	15	...	...	17	17	34	E C
...	1	...	2	...	...	...	1	1	1	3	4	...	...	...	1	1	1	...	...	13	18	31	...	...	55	52	107	
...	5	2	2	...	2	...	1	2	6	3	4	1	...	2	2	3	1	...	...	21	25	46	...	...	72	69	141	
...	...	1	...	...	1	1	1	1	1	3	2	4	2	2	2	1	2	1	1	16	14	30	...	...	22	16	38	E C
1	2	3	...	1	...	3	1	2	2	1	1	4	...	2	1	1	1	...	...	30	11	41	...	...	55	29	84	
4	2	4	...	1	1	4	2	3	3	4	3	8	2	4	3	2	3	1	1	46	25	71	...	...	77	45	122	
...	...	1	1	...	...	1	...	...	1	2	1	1	2	...	1	1	2	...	1	8	9	17	...	...	11	16	30	E C
...	...	1	5	1	...	...	1	...	...	4	2	2	1	2	1	1	...	1	...	18	15	33	...	...	37	34	71	
...	...	2	6	1	...	1	1	...	1	6	3	3	3	2	2	2	2	1	1	26	24	50	...	...	51	50	101	
1	1	...	1	...	1	1	2	...	2	2	...	2	...	...	1	2	...	2	...	8	12	20	...	...	13	21	34	E C
2	1	...	...	...	1	...	2	1	1	2	1	2	...	1	1	1	3	...	...	12	13	25	...	...	27	26	53	
3	2	...	1	...	2	1	4	1	3	4	1	4	...	1	1	2	5	...	2	20	25	45	...	...	40	47	87	
3	2	5	1	...	...	1	...	2	...	...	...	2	1	1	...	...	1	...	...	11	5	19	...	...	23	7	30	E C
1	3	5	1	3	...	4	1	3	1	5	2	3	1	...	2	1	...	...	...	30	14	44	...	...	58	33	91	
7	5	10	2	3	...	5	1	5	1	5	2	5	2	1	2	1	1	...	...	44	19	63	...	...	81	40	121	
...	...	...	...	...	...	...	...	...	...	1	1	3	...	1	...	2	...	...	...	7	2	9	...	...	9	6	15	E C
...	...	...	2	1	...	...	...	...	...	1	1	...	2	2	1	...	1	1	...	7	7	14	...	...	15	17	32	
...	...	...	2	1	...	...	...	...	...	1	2	1	5	2	2	...	3	1	1	14	9	23	...	...	24	23	47	
1	2	...	...	...	1	...	...	1	1	1	...	...	...	2	1	2	...	...	...	7	5	12	...	...	20	7	27	E C
...	2	...	...	...	1	1	1	...	1	1	1	...	...	1	...	...	...	...	...	4	8	12	...	...	10	18	28	
1	4	...	...	...	2	1	1	1	1	2	2	1	...	...	3	1	2	...	...	11	13	24	...	...	30	25	55	
52	45	99	46	118	51	106	51	212	92	218	112	182	91	141	90	85	83	19	30	1304	753	2062	1	...	2066	1451	3517	E C
143	135	237	148	323	159	307	148	434	240	304	180	208	112	142	108	103	91	41	56	2461	1611	4072	15	2	4768	3800	8568	
195	180	336	194	441	210	413	199	646	332	522	292	390	203	283	198	188	174	60	86	3765	2369	6134	16	2	6834	5251	12065	

## ANNEXURE "A."

TABLE No. 4.

Table showing for the Thirty-Five Chief Towns of the Colony combined the number of Deaths from between (a) Europeans and Coloured,

DISEASES.				0 Day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years.		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—		
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.	
<i>Class I., Sub-Class I.</i>																									
Small-pox	...	...	...	E	1	...	...	1	...	...	...	1	...	...	...	...	2	1	3	1	...	...	...		
				C	1	1	2	1	1	1	2	1	1	1	...	...	...	...	7	5	12	2	...	...	...
Total					2	1	2	1	2	1	2	1	2	...	...	...	9	6	15	3	...	...	...		
Chicken-pox	...	...	...	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
				C	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	2	2	...	...	...	...
Total					...	...	...	...	...	1	...	1	...	...	...	...	...	2	2	...	...	...	...		
Measles...	...	...	...	E	...	...	...	11	3	17	9	2	1	...	1	...	30	15	45	3	1	2	...		
				C	...	...	6	6	20	32	39	39	22	29	6	3	1	7	94	116	210	3	2	...	1
Total					...	...	6	6	31	35	56	48	24	30	6	4	1	8	124	131	255	6	3	2	1
Rötheln	...	...	...	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
				C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total					...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Scarlet-Fever	...	...	...	E	...	...	...	1	...	...	1	2	...	1	...	2	4	3	7	...	3	...	...		
				C	...	...	...	1	...	...	...	2	...	...	...	...	1	3	1	4	...	...	2	...	
Total					...	...	...	2	...	...	1	4	...	1	...	3	7	4	11	...	3	2	...		
Relapsing Fever	...	...	...	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
				C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total					...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Influenza	...	...	...	E	...	...	...	1	1	...	...	...	...	...	...	...	1	2	3	...	...	...	1		
				C	...	1	1	2	2	4	4	...	...	1	...	...	1	1	8	9	17	1	2	...	1
Total					...	1	1	3	3	4	4	1	...	1	...	1	1	9	11	20	1	2	...	2	
Whooping-Cough	...	...	...	E	...	...	8	3	1	4	2	6	...	2	1	2	13	17	30	...	1	...	...		
				C	...	...	10	15	12	13	10	13	4	7	3	3	1	6	40	57	97	3	2	...	...
Total					...	...	18	18	13	17	12	19	4	9	4	5	2	6	53	74	127	3	3	...	...
Diphtheria and Croup	...	...	...	E	...	1	...	1	2	5	4	1	5	8	3	2	17	18	35	8	12	2	1		
				C	1	1	4	5	12	7	13	10	2	7	6	...	3	7	41	37	78	6	5	1	2
Total					1	2	4	5	13	9	18	14	3	12	14	3	5	10	58	55	113	14	17	3	3
Cerebro-Spinal Fever	...	...	...	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
				C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total					...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Cerebro-Spinal Meningitis	...	...	...	E	1	...	...	...	1	1	2	...	...	1	...	...	3	3	6	...	...	2	...		
				C	...	...	2	...	1	...	...	1	...	1	...	1	...	1	3	4	7	1	...	...	1
Total					1	...	2	...	1	1	3	...	1	1	1	...	1	6	7	13	1	...	2	1	
Typhoid (Enteric) Fever, Typho-Malarial Fever, Simple Continued Fever, Remittent Fever and Fever	...	...	...	E	...	1	1	...	...	...	...	...	...	...	...	...	1	1	2	5	2	...	6		
				C	...	...	...	2	3	1	3	2	2	1	2	2	1	4	11	12	23	11	7	9	5
Total					...	1	1	2	3	1	3	2	2	1	2	2	1	4	12	13	25	16	9	9	11
Simple Cholera, Diarrhoea and Dysentery	...	...	...	E	2	4	38	35	35	28	20	15	5	3	1	1	102	86	188	2	1	...	...		
				C	14	9	90	89	123	100	96	84	35	31	10	6	2	2	370	321	691	10	15	3	6
Total					16	13	128	124	158	128	116	99	40	34	11	7	3	2	472	407	879	12	16	3	6





## ANNEXURE "A."

TABLE No. 4.—Continued.

DISEASES.		0 day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years.		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per-sons	M.	F.	M.	F.
Class I., Sub-Class I.—(Contd.)																						
Tuberculosis, including Hæmoptysis ... ..	E	...	...	5	13	10	13	9	8	3	5	2	1	3	1	32	41	73	5	1	...	1
	C	3	1	19	33	27	29	54	38	25	21	15	16	9	8	152	146	298	36	51	29	51
Total ...		3	1	24	46	37	42	63	46	28	26	17	17	12	9	184	187	371	41	52	29	55
Erysipelas, Pyæmia, Septi- cæmia and Hospital Gan- grene ... ..	E	1	1	...	1	...	...	...	...	1	...	...	...	...	...	3	1	4	...	...	1	1
	C	2	...	4	1	...	...	...	...	1	...	...	...	...	...	7	1	8	2	...	...	1
Total ...		3	1	4	1	1	...	...	...	2	...	...	...	...	...	10	2	12	2	...	1	1
Puerperal Fever ... ..	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ... ..	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	C	...	...	...	2	...	...	...	...	...	...	...	1	...	...	2	1	3	2	...	1	2
Total ...		...	...	...	2	...	...	...	...	...	...	...	1	...	...	2	1	3	2	...	1	3
Others of Sub-Class I.	E	2	1	1	1	...	2	...	...	...	1	...	...	...	...	3	5	8	...	...	...	...
	C	3	1	14	17	2	1	4	3	5	1	1	1	...	2	29	26	55	...	...	1	...
Total ...		5	2	15	18	2	3	4	3	5	2	1	1	...	2	32	31	63	...	...	1	...
Class I., Sub-Class II.																						
Thrush, Stomatitis ... ..	E	...	...	...	1	...	...	...	1	...	...	...	...	...	...	2	...	2	...	...	...	...
	C	2	2	1	1	1	1	...	1	...	...	...	...	...	...	4	1	8	...	...	...	...
Total ...		2	2	1	2	1	...	1	1	...	...	...	...	...	...	6	4	10	...	...	...	...
From other Vegetable and Animal Parasites ... ..	E	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	3	3	1	1	...	...
	C	...	...	...	...	...	...	1	...	2	1	...	...	1	...	1	4	5	2	...	...	...
Total ...		...	...	...	...	...	...	2	...	3	1	1	...	1	...	1	7	8	3	1	...	...
Class III.																						
Cancer (Malignant Disease)	E	...	...	...	...	1	...	...	...	...	...	1	...	...	...	1	1	2	...	...	...	1
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Total ...		...	...	...	1	...	...	...	...	...	1	...	...	...	...	1	1	2	...	...	1	1
Others of Class III. ... ..	E	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	1	3	...	...
	C	...	...	...	1	...	...	...	...	...	...	...	...	1	...	2	...	2	...	1	...	...
Total ...		...	...	...	1	...	...	...	...	...	...	1	...	1	...	3	...	3	1	4	...	...
Class IV.																						
Premature Birth ... ..	E	52	61	6	5	...	...	1	...	...	...	...	...	...	...	59	66	125	...	...	...	...
	C	121	107	6	4	...	1	...	...	...	...	...	...	...	...	127	112	239	...	...	...	...
Total ...		173	168	12	9	...	1	1	...	...	...	...	...	...	...	186	178	364	...	...	...	...
Malformations ... ..	E	9	7	2	3	1	2	1	2	...	1	...	...	...	...	13	15	28	...	...	...	...
	C	14	17	1	...	2	2	1	...	...	...	1	...	...	...	22	19	41	...	...	...	...
Total ...		23	24	6	3	3	4	2	2	...	1	1	...	...	...	35	34	69	...	...	...	...
Dentition ... ..	E	...	...	1	...	6	1	2	3	...	...	...	...	...	...	9	1	13	...	...	...	...
	C	...	...	1	1	13	12	16	9	1	1	...	...	...	...	31	23	54	...	...	...	...
Total ...		...	...	2	1	19	13	18	12	1	1	...	...	...	...	40	27	67	...	...	...	...
Old Age (Senile decay)	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...



## ANNEXURE "A."

TABLE No. 4.—Continued.

15 —		20 —		25 —		30 —		35 —		40 —		45 —		50 —		55 —		60 —		65 —		70 —		75 —		80 —		85 up.		TOTAL OVER 5 YEARS.			Unspec-ified.		ALL AGES.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per-sons	M.	F.	M.	F.	Per-sons		
7	10	29	15	31	12	35	20	45	9	26	7	18	3	1	2	...	...	1	...	201	83	287	...	...	236	124	360	...	...	...	...	...	...	...	...	...	...	...	...
19	68	78	72	82	80	95	61	129	93	81	51	28	20	15	7	10	9	1	1	636	561	1200	1	...	789	710	1499	...	...	...	...	...	...	...	...	...	...	...	...
56	78	107	87	116	92	130	81	174	102	110	58	46	23	19	9	10	9	2	1	840	647	1487	1	...	1025	834	1859	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	...	1	1	...	2	1	2	3	3	3	...	...	...	...	1	...	...	10	9	19	...	...	13	10	23	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	1	4	1	6	3	3	2	2	...	...	1	1	...	...	1	...	...	18	10	28	...	...	25	11	36	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	1	5	2	6	5	4	4	5	3	3	1	1	...	...	2	...	...	28	19	47	...	...	38	21	59	...	...	...	...	...	...	...	...	...	...	...	...
...	2	...	1	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	9	9	...	...	...	9	9	...	...	...	...	...	...	...	...	...	...	...	...
...	1	...	4	...	6	...	1	...	2	...	1	...	...	...	...	...	...	...	...	...	15	15	...	...	...	15	15	...	...	...	...	...	...	...	...	...	...	...	...
...	3	...	8	...	8	...	2	...	2	...	1	...	...	...	...	...	...	...	...	...	24	24	...	...	...	24	24	...	...	...	...	...	...	...	...	...	...	...	...
3	1	2	...	2	...	1	...	2	...	1	1	...	...	...	...	...	...	...	...	11	3	14	...	...	11	3	14	...	...	...	...	...	...	...	...	...	...	...	...
2	2	5	4	15	2	15	2	8	1	3	2	2	...	...	...	...	...	...	...	53	15	68	...	...	55	16	71	...	...	...	...	...	...	...	...	...	...	...	...
5	3	7	4	17	2	16	2	10	1	4	3	2	...	...	...	...	...	...	...	64	18	82	...	...	66	19	85	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	...	...	1	3	...	...	...	2	2	...	...	...	...	...	...	...	...	6	3	9	...	...	9	8	17	...	...	...	...	...	...	...	...	...	...	...	...
2	2	5	3	8	2	5	2	7	2	6	6	3	1	1	2	...	...	...	38	21	59	...	...	67	47	114	...	...	...	...	...	...	...	...	...	...	...	...	
2	2	6	3	8	3	8	2	7	2	8	8	3	1	1	2																								

## ANNEXURE "A."

TABLE No. 4.—Continued.

DISEASES.		0 day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.	
Class IV.—(Contd.)																							
Others of Class IV. ...	E	2	3	1	2	1	...	...	...	...	...	...	...	...	...	4	5	9	...	...	...	...	
	C	3	3	1	2	...	...	...	...	1	...	...	...	...	...	5	5	10	...	1	...	...	
Total ...		5	6	2	4	1	...	...	...	1	...	...	...	...	...	9	10	19	...	1	...	...	
Class V., Sub-Class I.																							
Acute Inflammation of Brain and its Membranes ...	E	2	2	5	7	13	7	3	6	2	3	...	1	1	1	26	27	53	2	1	1	1	
	C	5	2	9	9	6	10	4	9	2	6	6	4	1	1	33	41	74	7	2	2	1	
Total ...		7	4	14	16	19	17	7	15	4	9	6	5	2	2	59	68	127	9	3	3	2	
Convulsions ...	E	23	15	13	10	7	6	3	2	...	1	1	1	1	1	48	36	84	1	...	1	...	
	C	106	78	44	40	19	36	10	5	9	6	2	3	...	4	190	172	362	2	...	...	2	
Total ...		129	93	57	50	26	42	13	7	9	7	3	4	1	5	238	208	446	3	...	1	2	
Others of Sub-Class I....	E	...	1	...	1	...	...	...	1	1	...	...	...	...	...	1	3	4	...	...	2	2	
	C	3	2	3	...	...	4	1	1	...	...	...	...	2	...	9	7	16	3	...	...	1	
Total ...		3	3	3	1	...	4	1	2	1	...	...	...	2	...	10	10	20	3	...	2	3	
Class V., Sub-Class III.																							
Heart Disease, Organic De- generation and Syncope, &c.	E	1	...	...	...	1	1	...	...	...	...	...	...	...	...	2	1	3	2	2	4	5	
	C	1	...	...	...	3	...	1	1	1	1	2	...	1	...	9	2	11	4	5	7	6	
Total ...		2	...	...	...	4	1	1	1	1	1	2	...	1	...	11	3	14	6	7	11	11	
Apoplexy ...	E	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	
	C	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2	...	2	...	...	...	1	
Total ...		...	...	...	...	1	1	...	...	1	...	...	...	...	...	2	1	3	...	...	1	1	
Others of Sub-Class III.	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
	C	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	
Total ...		1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	
Class V., Sub-Class IV.																							
Bronchitis ...	E	2	2	19	12	5	12	4	8	2	1	...	2	...	...	32	37	69	1	...	...	2	
	C	15	21	70	64	59	50	57	71	21	16	5	9	2	7	229	238	467	7	3	2	2	
Total ...		17	23	89	76	64	62	61	79	23	17	5	11	2	7	261	275	536	8	3	2	4	
Pneumonia, Inflammation and Congestion of Lungs and Pleurisy, &c. ...	E	3	2	16	12	16	14	17	13	4	5	1	2	2	...	59	48	107	4	2	3	1	
	C	4	10	80	65	106	83	78	83	31	33	16	17	7	9	322	300	622	14	15	11	11	
Total ...		7	12	96	77	122	97	95	96	35	38	17	19	9	9	381	348	729	18	17	14	12	
Others of Sub-Class IV.	E	...	...	...	1	1	...	...	1	1	...	1	...	...	1	3	3	6	...	...	...	...	
	C	1	1	7	3	8	6	6	9	5	2	1	1	1	2	29	24	53	1	2	1	1	
Total ...		1	1	7	4	9	6	6	10	6	2	2	1	1	3	32	27	59	1	2	1	1	
Class V., Sub-Class V.																							
Enteritis Gastro-Enteritis and Marasmus ...	E	11	4	104	66	67	79	32	25	4	4	3	1	...	2	221	181	402	3	1	1	4	
	C	30	25	125	130	95	116	85	62	15	21	8	7	2	3	360	364	724	4	8	3	2	
Total ...		41	29	229	196	162	195	117	87	19	25	11	8	2	5	581	545	1126	7	9	4	6	
Others of Sub-Class V.	E	1	...	1	1	1	3	...	2	1	...	...	...	3	1	7	7	14	1	1	1	2	
	C	3	5	3	2	1	3	1	1	1	...	...	...	...	1	9	12	21	1	2	1	...	
Total ...		4	5	4	3	2	6	1	3	2	...	...	...	3	2	16	19	35	2	3	2	2	
Class V., Sub-Class VI.																							
Diseases of the Liver ...	E	...	2	...	1	...	...	...	...	...	...	1	...	...	...	1	3	4	...	...	...	...	
	C	2	1	2	...	...	...	...	...	...	...	...	...	...	...	4	1	5	...	...	...	...	
Total ...		2	3	2	1	...	...	...	...	...	...	1	...	...	...	5	4	9	...	...	...	...	



ANNEXURE “A.”

TABLE No. 4.—*Continued.*

15—		20—		25—		30—		35—		45—		55—		65—		75—		85 up.		TOTAL OVER 5 YEARS.			Un- specified.	ALL AGES.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons		M.	F.	Per- sons	
...	...	...	...	...	...	...	...	1	...	...	1	1	1	...	...	...	...	...	...	2	2	4	...	6	7	13	} E C
1	...	1	1	...	...	...	...	1	2	...	3	2	2	...	...	...	...	...	...	5	9	14	...	10	14	24	
1	...	1	1	...	...	...	...	2	2	...	4	3	3	...	...	...	...	...	...	7	11	18	...	16	21	37	
3	1	...	...	1	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	8	6	14	...	34	33	67	} E C
3	1	3	...	3	1	3	...	1	2	...	1	2	...	1	...	...	...	...	...	25	8	33	...	58	49	107	
6	2	3	...	4	1	3	...	1	2	...	2	3	2	1	...	...	...	...	...	33	14	47	...	92	82	174	
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	51	36	87	} E C
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	192	174	366	
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7	...	243	210	453	
1	1	...	2	3	1	2	5	10	5	11	7	12	5	8	6	3	3	1	3	53	40	93	...	54	43	97	} E C
4	...	3	1	4	2	10	5	14	7	10	7	16	7	3	3	4	3	...	1	71	37	108	...	80	44	124	
5	1	3	3	7	3	12	10	24	12	21	14	28	12	11	9	7	6	1	4	124	77	201	...	134	87	221	
2	4	5	4	10	6	7	4	25	12	31	20	20	18	19	21	16	9	4	3	145	108	253	...	147	109	256	} E C
4	3	7	3	16	13	10	10	32	21	38	22	30	12	19	11	16	14	4	3	187	123	310	...	196	126	322	
6	7	12	7	26	19	17	14	57	33	69	42	50	30	38	32	32	23	8	6	332	231	563	...	343	235	578	
...	1	1	...	...	...	2	...	11	4	8	9	14	5	20	6	5	9	1	2	63	36	99	...	63	37	100	} E C
...	...	...	...	1	...	...	2	6	4	9	7	10	12	11	6	6	4	5	4	48	40	88	...	50	40	90	
...	1	1	...	1	...	2	2	17	8	17	16	24	17	31	12	11	13	6	6	111	76	187	...	113	77	190	
...	...	2	1	1	...	1	1	4	...	6	...	5	2	2	1	3	1	...	...	25	6	31	...	25	6	31	} E C
1	...	1	...	...	...	1	...	5	1	2	...	2	...	1	1	2	...	...	1	15	3	18	1	17	3	20	
1	...	3	1	1	...	2	1	9	1	8	...	7	2	3	2	5	1	...	1	40	9	49	1	42	9	51	
...	...	...	...	...	...	1	...	1	2	10	1	1	2	10	2	12	7	2	1	41	17	58	...	73	54	127	} E C
1	...	1	4	3	3	5	2	4	6	10	8	10	7	13	7	6	11	2	5	64	58	122	...	293	296	589	
1	...	1	4	3	3	6	2	5	8	20	9	14	9	23	9	18	18	4	6	105	75	180	...	366	350	716	
2	4	2	3	7	...	8	1	28	7	19	4	14	5	12	7	2	6	1	...	102	40	142	...	161	88	249	} E C
33	23	62	16	96	23	76	25	108	37	76	24	42	20	27	26	10	7	4	2	559	229	788	4	885	529	1414	
35	27	64	19	103	23	84	26	136	44	95	28	56	25	39	33	12	13	5	2	661	269	930	4	1046	617	1663	
...	...	...	...	1	1	1	...	1	...	2	...	...	...	2	...	...	1	...	...	7	2	9	...	10	5	15	} E C
...	2	...	...	1	...	2	...	1	1	...	2	1	3	2	4	1	1	2	...	12	16	28	...	41	40	81	
...	2	...	...	2	1	3	...	2	1	2	2	1	3	4	4	1	2	2	...	19	18	37	...	51	45	96	
...	1	1	...	2	3	3	1	5	1	8	6	5	2	1	7	1	1	...	...	30	27	57	...	251	208	459	} E C
3	2	4	3	6	1	6	3	6	5	6	3	2	1	1	2	2	1	...	1	46	32	78	...	406	396	802	
3	3	5	3	8	4	9	4	11	6	14	9	7	3	5	9	3	2	...	1	76	59	135	...	657	604	1261	
1	...	3	1	2	1	4	1	5	2	4	6	3	2	3	4	2	2	...	1	29	23	52	...	36	30	66	} E C
1	2	1	3	4	3	7	2	4	2	3	3	2	1	...	1	...	...	...	1	24	20	44	...	33	32	65	
2	2	4	4	6	4	11	3	9	4	7	9	5	3	3	5	2	2	...	2	53	43	96	...	69	62	131	
1	...	...	1	1	...	3	...	9	5	13	7	8	6	7	2	1	2	...	1	49	24	73	...	50	27	77	} E C
1	...	...	...	3	...	2	...	4	1	1	1	6	...	3	...	1	1	1	1	22	4	26	2	28	5	33	
2	...	...	1	7	...	5	...	13	6	14	8	14	6	10	2	5	3	1	2	71	28	99	2	78	32	110	

## ANNEXURE "A."

TABLE No. 4.—Continued.

DISEASE.		0 day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years.		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.	
<i>Class V., Sub-Class VIII.</i>																							
Bright's Disease, Nephritis, Uræmia	E	...	...	...	...	1	1	...	2	1	...	...	...	1	...	3	3	6	...	1	1	...	
	C	...	1	1	2	...	2	1	6	...	3	...	1	...	...	5	15	20	1	4	...	1	
Total	...	...	1	4	2	1	3	1	8	1	3	...	1	1	...	8	18	26	4	5	1	1	
<i>Others of Sub-Class VIII.</i>																							
Others of Sub-Class VIII.	E	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	
	C	...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	1	2	...	...	...	...	
Total	...	...	1	...	...	1	...	...	...	...	1	...	...	...	1	2	3	...	...	...	...		
<i>Class V., Sub-Class IX.</i>																							
Diseases of Parturition	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
<i>Class VI.</i>																							
Violence	E	...	2	1	3	...	...	2	3	2	1	1	1	1	1	7	11	18	5	1	2	1	
	C	5	6	...	...	1	...	4	2	3	1	3	1	1	2	17	12	29	7	1	5	1	
Total	...	5	8	1	3	1	...	6	5	5	2	4	2	2	3	24	23	47	12	5	7	5	
<i>Class VII.</i>																							
Debility, Atrophy and Inani- tion	E	21	10	5	8	9	3	...	...	...	...	...	...	...	...	35	21	56	...	...	...	...	
	C	50	36	16	11	2	4	3	3	...	...	...	...	...	...	71	51	125	...	...	...	...	
Total	...	71	46	21	19	11	7	3	3	...	...	...	...	...	106	75	181	...	...	...	...		
<i>Others of Class VII.</i>																							
Others of Class VII.	E	1	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	2	...	...	...	1	
	C	7	6	...	...	...	...	3	...	...	1	...	...	...	...	10	8	18	2	1	1	...	
Total	...	8	6	...	...	...	...	4	1	...	1	...	...	...	12	8	20	2	1	1	1		
<i>All other Diseases not included in above (i.e. Class II., Sub- Classes II., VII., and XI. of Class V.</i>																							
All other Diseases not included in above (i.e. Class II., Sub- Classes II., VII., and XI. of Class V.	E	1	5	6	8	2	6	2	4	1	...	1	...	1	...	11	23	37	1	...	1	...	
	C	2	5	18	18	8	3	2	4	1	...	...	...	1	1	32	31	63	1	...	3	...	
Total	...	3	10	24	26	10	9	4	8	2	...	1	...	2	1	46	54	100	2	...	4	...	
Total	...	E	136	124	233	193	194	191	122	119	34	35	25	17	17	14	761	693	1454	47	34	25	33
	C	399	343	546	522	532	521	498	461	191	194	89	76	37	70	2292	2187	4479	136	132	83	102	
Grand Total	...	535	467	779	715	726	712	620	580	225	229	114	93	54	84	3053	2880	5933	183	166	108	135	



ANNEXURE “A.”

TABLE No. 4.—*Continued.*

15—		20—		25—		30—		35—		40—		45—		50—		55—		60—		65—		70—		75—		80 up.		TOTAL OVER 5 YEARS.			Unspeci- fied.	ALL AGES.					
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons		M.	F.	Per- sons	M.	F.	Per- sons
2	...	4	3	3	...	2	...	7	6	10	4	16	4	6	6	5	2	...	...	56	26	82	...	...	59	29	88	}	E	...	...	59	29	88	}	C	
1	1	1	1	3	1	2	3	9	4	10	5	8	3	1	6	2	1	...	2	41	35	76	...	...	46	50	96			...	...	46	50	96			
3	1	5	4	6	4	4	3	16	10	20	9	24	7	7	12	7	3	...	2	97	61	158	...	...	105	79	184										
...	...	3	2	...	3	...	2	4	6	3	5	10	1	4	1	6	1	1	1	...	31	21	52	...	...	31	22	53	}	E	...	...	31	22	53	}	C
...	3	1	2	1	...	1	3	2	2	1	...	5	1	6	3	1	1	1	...	19	15	34	...	...	20	16	36	...			...	20	16	36			
...	3	4	4	1	3	1	5	6	8	4	5	15	2	10	4	7	2	2	...	50	36	86	...	...	51	38	89										
...	1	...	2	...	7	...	1	...	7	...	...	...	...	...	...	...	...	...	...	...	18	18	...	...	...	18	18	}	E	...	...	...	18	18	}	C	
...	2	...	9	...	6	...	3	...	8	...	1	...	...	...	...	...	...	...	...	...	29	29	...	1	...	30	30			...	...	...	30	30			
...	3	...	11	...	13	...	4	...	15	...	1	...	...	...	...	...	...	...	...	...	47	47	...	1	...	48	48										
9	1	20	2	21	3	15	2	23	3	15	2	4	2	1	...	...	2	...	2	118	21	139	1	...	126	32	158	}	E	...	...	126	32	158	}	C	
9	6	27	1	26	2	30	2	33	6	17	3	7	3	5	...	...	...	...	1	166	32	198	4	...	187	41	231			...	...	187	41	231			
18	7	47	3	47	5	45	4	56	9	32	5	11	5	9	...	...	2	...	3	284	53	337	5	...	313	76	389										
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	}	E	...	...	35	21	56	}	C
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	3	1	4	...	...	74	55	129	...		...	74	55	129				
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	3	1	4	...	...	109	76	185										
...	...	...	1	...	...	...	1	...	1	1	...	1	1	3	...	...	...	...	...	5	5	10	...	...	7	5	12	}	E	...	...	7	5	12	}	C	
1	...	...	1	1	2	2	1	5	2	4	2	3	1	...	1	1	2	...	...	23	13	36	2	...	35	21	56			...	...	35	21	56			
1	...	...	2	4	2	2	2	5	3	5	2	4	2	3	1	1	2	...	...	28	18	46	2	...	42	26	68										
1	...	1	1	2	2	3	1	7	4	14	1	5	...	1	1	1	1	...	1	37	12	49	...	...	51	35	86	}	E	...	...	51	35	86	}	C	
3	1	8	1	12	...	13	1	20	6	4	1	5	2	1	...	2	...	...	...	72	12	81	...	...	104	43	147			...	...	104	43	147			
4	1	9	1	14	2	16	2	27	10	18	2	10	2	2	1	3	1	...	1	109	24	133	...	...	155	78	233										
52	45	99	46	118	51	106	51	212	92	218	112	182	91	141	90	85	83	19	30	1304	758	2062	1	...	2066	1451	3517	}	E	...	...	2066	1451	3517	}	C	
143	135	237	148	323	159	307	148	434	240	304	180	208	112	142	108	103	91	41	56	2461	1611	4072	15	2	4768	3800	8568			...	...	4768	3800	8568			
195	180	336	194	441	210	413	199	646	332	522	292	390	203	283	198	188	174	60	86	3765	2369	6134	16	2	6834	5251	12085										

## ANNEXURE "A."

TABLE NO. 5.

Table showing for the Thirty-five Chief Towns of the Colony combined the number of Deaths  
between (a) European and Coloured

CLASSES AND SUB-CLASSES.				0 day to 1 month.		1 month and under 6 months.		6 months and under 12 months.		12 months and under 2 years.		2 years and under 3 years.		3 years and under 4 years.		4 years and under 5 years.		TOTAL UNDER 5 YEARS.			5—		10—	
				M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.
Class I., Sub-Class I. ...	...	{	E	7	8	53	53	62	52	54	46	14	18	14	8	7	7	211	192	403	24	21	7	13
			C	24	13	152	171	206	188	225	192	99	101	43	33	18	39	767	737	1504	77	84	46	70
Do. do. II. ...	...	{	E	...	...	...	...	1	...	...	1	1	1	...	1	...	...	2	3	5	1	1	...	...
			C	2	2	1	...	1	1	...	2	...	2	1	...	...	1	5	8	13	2	...	...	...
Class II. ...	...	{	E	1	4	5	8	2	4	2	2	1	...	1	...	...	...	12	18	30	...	...	...	...
			C	1	3	13	15	8	2	2	3	1	...	...	...	...	...	25	23	48	...	...	1	...
Class III. ...	...	{	E	...	...	...	...	...	1	...	...	...	...	2	...	...	...	2	1	3	1	3	...	1
			C	...	...	...	...	1	...	...	...	...	...	...	...	1	...	2	...	2	...	1	1	...
Class IV. ...	...	{	E	63	71	10	10	8	3	4	5	...	1	...	...	...	...	85	90	175	...	...	...	...
			C	138	127	12	7	15	15	17	9	2	1	1	...	...	...	185	159	344	...	1	...	...
Class V, Sub Class I. ...	...	{	E	25	18	18	18	20	13	6	9	3	4	1	2	2	2	75	66	141	3	1	4	3
			C	114	82	56	49	25	50	15	15	11	12	8	7	3	5	232	220	452	12	2	2	4
Do., do. II. ...	...	{	E	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	3	3	...	...	...	...
			C	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	2	1	...	1	...
Do., do. III. ...	...	{	E	1	...	...	...	1	2	...	...	...	...	...	...	...	...	2	2	4	3	2	5	5
			C	2	...	...	...	4	...	1	1	2	1	2	...	1	...	12	2	14	4	5	7	7
Do., do. IV. ...	...	{	E	5	4	35	25	22	27	21	22	7	6	2	4	2	1	94	89	183	5	2	3	3
			C	20	33	157	132	173	139	141	163	57	51	22	27	10	18	580	563	1143	22	20	14	14
Do., do. V. ...	...	{	E	12	4	105	67	68	82	32	27	5	4	3	1	3	3	228	188	416	4	2	2	6
			C	33	30	128	132	96	119	86	63	16	21	8	7	2	4	369	376	745	5	10	4	2
Do., do. VI. ...	...	{	E	...	2	...	1	...	...	...	...	...	...	1	...	...	...	1	3	4	...	...	...	...
			C	2	1	2	...	...	...	...	...	...	...	...	...	...	...	4	1	5	...	...	...	...
Do., do. VII. ...	...	{	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
			C	...	...	1	...	...	...	...	...	...	...	...	...	1	...	2	...	2	...	...	...	...
Do., do. VIII. ...	...	{	E	...	...	...	...	1	2	...	2	1	...	...	...	1	...	3	4	7	...	1	1	...
			C	...	2	4	2	...	2	1	6	...	3	1	1	...	...	6	16	22	4	4	...	1
Do. do. IX. ...	...	{	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Do., do. X. ...	...	{	E	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1	2	...	...	1	...
			C	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	2	2	...	...	1	...
Do., do. XI. ...	...	{	E	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...
			C	...	2	4	2	...	1	...	...	...	...	...	...	...	...	4	5	9	...	...	...	...
Class VI., Sub-Class I. ...	...	{	E	...	...	1	3	...	...	2	3	2	1	1	1	1	1	7	9	16	5	1	2	1
			C	1	5	...	...	1	...	4	2	3	1	3	1	1	2	13	11	24	7	4	5	4
Do., do. II. ...	...	{	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Do., do. III. ...	...	{	E	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...
			C	4	1	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	...	...	...	...
Do., do. IV. ...	...	{	E	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			C	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Class VII. ...	...	{	E	22	10	5	8	9	3	1	...	...	...	...	...	...	...	37	21	58	...	...	...	1
			C	57	42	16	11	2	4	6	4	...	1	...	...	...	...	81	62	143	2	1	1	...
Grand Total ...	...	...		535	467	779	715	726	712	620	580	225	229	114	93	54	84	3053	2880	5933	183	166	108	135



ANNEXURE “A.”—(Continued).

TABLE 5.—(Continued).

registered for the Year 1903, arranged according to Classes at each age period ; distinguishing and (b) Males and Females.

15—		20—		25—		30—		35—		45—		55—		65—		75—		85 up.		TOTAL OVER 5 YEARS.			Unspeci- fied.		ALL AGES.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons	M.	F.	M.	F.	Per- sons	
29	27	55	21	57	24	52	29	59	19	40	15	27	9	10	12	4	8	1	4	365	202	567	...	...	576	394	970	
73	88	114	99	134	98	132	83	168	118	108	75	45	25	23	17	21	15	6	2	947	774	1721	2	...	1716	1511	3227	
...	...	...	...	...	...	...	...	1	...	1	...	3	...	...	...	...	...	...	...	6	1	7	...	...	8	4	12	
...	...	...	...	...	...	1	...	3	...	...	1	...	...	...	...	...	...	...	...	6	1	7	...	...	11	9	20	
...	...	...	...	2	...	3	1	5	3	11	...	4	...	1	...	...	...	...	...	26	4	30	...	...	38	22	60	
2	...	8	...	11	...	12	1	19	5	4	1	4	1	1	...	...	...	...	...	62	8	70	...	...	87	31	118	
1	4	2	2	2	...	...	1	8	8	21	23	27	24	18	8	5	6	...	2	85	82	167	...	...	87	83	170	
3	...	1	1	5	1	4	3	6	5	5	11	9	10	6	8	6	2	...	1	46	43	89	...	...	48	43	91	
...	...	...	...	...	...	...	...	1	...	...	1	3	1	11	6	16	22	8	10	39	40	79	...	...	124	130	254	
2	...	1	1	...	...	...	...	1	2	...	3	3	4	15	12	21	27	16	30	59	80	139	...	...	244	239	483	
4	2	...	2	5	1	2	5	10	5	11	8	13	7	8	6	3	3	1	3	64	46	110	...	...	139	112	251	
7	1	6	1	7	3	13	5	15	9	10	8	18	7	4	3	4	3	...	1	98	47	145	...	...	330	267	597	
...	...	1	1	...	...	...	...	...	1	1	...	...	...	...	...	...	1	...	...	2	3	5	...	...	2	6	8	
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	...	3	3	6	
2	5	8	5	11	6	10	5	40	16	45	29	39	25	41	28	24	19	5	5	233	150	383	...	...	235	152	387	
5	3	8	3	17	13	11	12	43	26	49	29	42	24	31	18	24	18	9	8	250	166	416	1	1	263	169	432	
2	4	2	3	9	1	12	2	33	9	32	5	18	7	24	9	14	14	3	1	157	60	217	...	...	251	149	400	
34	26	65	22	100	26	83	27	115	44	86	34	53	30	42	37	17	19	8	8	639	307	946	4	...	1223	870	2093	
1	1	4	1	4	4	7	2	10	3	12	12	8	4	4	11	3	3	...	1	59	50	109	...	...	287	238	525	
4	4	5	6	10	4	13	5	10	7	9	6	4	2	4	3	2	1	...	2	70	52	122	...	...	439	428	867	
1	...	...	1	4	...	3	...	9	5	13	7	8	6	7	2	4	2	...	1	49	24	73	...	...	50	27	77	
1	...	...	...	3	...	2	...	4	1	1	1	6	...	3	...	1	1	1	1	22	4	26	2	...	28	5	33	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
2	...	7	5	3	3	2	2	11	12	13	9	26	5	10	7	11	3	1	...	87	47	134	...	...	90	51	141	
1	4	2	3	4	4	3	6	11	6	11	5	13	4	7	9	3	2	1	2	60	50	110	...	...	66	66	132	
...	1	...	2	...	7	...	1	...	7	...	...	...	...	...	...	...	...	...	...	...	18	18	...	...	...	18	18	...
...	2	...	9	...	6	...	3	...	8	...	1	...	...	...	...	...	...	...	...	...	29	29	...	1	...	30	30	...
1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	1	4	...	...	4	2	6	
1	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	1	...	...	...	5	1	6	...	...	5	3	8	
...	...	...	...	...	1	...	...	1	...	2	1	1	...	...	1	1	...	...	1	5	4	9	...	...	6	5	11	
...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	1	...	...	...	3	1	4	...	...	7	6	13	
9	1	16	1	14	3	7	2	20	3	10	2	3	1	3	...	...	2	...	2	89	19	108	1	...	97	28	125	
8	5	22	1	22	2	27	...	26	5	16	2	6	3	4	...	...	...	...	1	143	27	170	3	...	159	38	197	
...	...	3	1	4	...	8	...	2	...	4	...	1	1	...	...	...	...	...	...	22	2	24	...	...	22	2	24	
...	1	...	...	2	...	1	...	5	...	1	...	...	...	...	...	...	...	...	...	9	1	10	1	...	10	1	11	
...	...	1	...	3	...	...	...	1	...	1	...	...	...	1	...	...	...	...	...	7	...	7	...	...	7	2	9	
1	...	4	...	1	...	2	2	2	1	...	1	1	...	1	...	...	...	...	...	12	4	16	...	...	16	5	21	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	2	...	2	...
...	...	...	1	...	...	...	1	...	1	1	...	1	1	3	...	...	...	...	...	5	5	10	...	...	42	26	68	
1	...	...	1	5	2	2	1	5	2	4	2	3	1	1	1	2	3	...	...	26	14	40	2	...	109	76	185	
195	180	336	194	441	210	413	199	646	332	522	292	390	203	283	198	188	174	60	86	3765	2369	6134	16	2	6834	5251	12085	

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

TABLE 1.

Return of outbreaks and cases of Small-pox occurring in the Colony Proper during the Half-year ended 30th June, 1904.

DISTRICT.	Number of Outbreaks.	CASES DISCOVERED.								TOTAL.	DEATHS.								TOTAL.
		Unvaccinated.				Vaccinated.					Unvaccinated.				Vaccinated.				
		Europ.		Col.		Europ.		Col.			Europ.		Col.		Europ.		Col.		
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	
Venterstad (Albert)	1	...	...	...	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...
Cape	...	5	...	...	...	...	3	1	...	1	...	...	...	...	...	...	...	...	...
Durbanville	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Carnarvon	...	1	...	...	1	4	...	...	...	5	...	...	...	...	...	...	...	...	...
Colesberg	...	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
East London	...	2	1	...	1	...	3	3	...	8	...	...	...	...	...	...	...	...	...
Glen Grey	...	6	...	...	15	15	...	...	1	8	39	...	...	1	1	...	...	...	12
Graaff-Reinet	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Herschel	...	2	...	...	3	1	...	...	...	7	...	...	...	...	...	...	...	...	...
Malmesbury	...	3	...	...	5	2	...	...	...	7	...	...	...	...	...	...	...	...	...
Namaqualand	...	3	...	...	7	4	...	...	...	11	...	...	...	...	...	...	...	...	...
Oudtshoorn	...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...
Paarl	...	2	...	...	3	2	...	...	...	5	...	...	...	...	...	...	...	...	...
Robertson	...	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Steytlerville	...	1	...	...	...	...	1	...	3	3	7	...	...	...	...	...	...	...	...
Stutterheim	...	1	...	...	2	2	...	...	...	4	...	...	...	...	...	...	...	...	...
Victoria East	...	1	...	...	1	1	...	...	...	2	...	...	...	...	...	...	...	...	...
Willowmore	...	1	2	...	...	...	1	2	...	5	...	...	...	...	...	...	...	...	...
Worcester	...	2	...	...	1	2	...	...	...	3	...	...	...	...	...	...	...	...	...
Total	...	36	3	...	41	37	8	6	7	15	117	...	...	1	1	...	...	...	2

Summary.

	Cases.	Deaths.	Mortality %
Unvaccinated	81	2	2.47 %
Pre-vaccinated	36	...	...
Total	117	2	1.71 %

"NIL" B. Returns (Smallpox) received from the following Districts of the Colony Proper :—

Aberdeen.	Fort Beaufort.	Kuruman.	Riversdale.
Albany.	Adelaide.	Ladismith.	Simon's Town.
Albert.	Fraserburg.	Mafeking.	Somerset East.
Alexandria.	Williston.	Hopefield (Malmesbury).	Pearston.
Aliwal North.	George.	Middelburg.	Stellenbosch.
Jamestown.	Gordonia.	Molteno.	Somerset West.
Lady Grey.	New Bethesda (Graaff-Reinet).	Montagu.	Steynsburg.
Barkly East.	Hanover.	Mossel Bay.	Stockenstrom.
Rhodes.	Hay.	Murraysburg.	Sutherland.
Barkly West.	Postmasburg	Calitzdorp (Oudtshoorn)	Swellendam.
Klipdam.	Herbert.	Wellington (Paarl).	Barrydale.
Bathurst.	Hope Town.	Peddie.	Tarka.
Beaufort West.	Strydenburg.	Philipstown.	Taung.
Bedford.	Humansdorp.	Petrusville.	Tulbagh.
Bredasdorp.	Jansenville.	Piquetberg.	Uitenhage.
Britstown.	Kenhardt.	Porterville.	Uniondale.
De Aar.	Kakamas.	Port Elizabeth.	Van Rhynsdorp.
Caledon.	Kimberley	New Brighton.	Victoria West.
Calvinia.	Beaconsfield.	Port Nolloth.	Vosburg.
Cathcart.	Warrenton.	Prieska.	Vryburg.
Ceres.	King William's Town.	Prince Albert.	Wodehouse.
Clanwilliam.	Keiskama Hoek.	Laingsburg.	Indwe.
Craddock.	Middledrift.	Queenstown.	Wynberg.
Maraisburg.	Knysna.	Sterkstroom.	Rondebosch and Mowbray.
Maclean Town (East London).	Komgha.	Whittlesea.	
		Richmond.	



REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE “B.”

TABLE 2.

Return of Outbreaks and Cases of Smallpox occurring in the Native Territories during the Half-year ended 30th June, 1904.

DISTRICT.	Number of Outbreaks.	CASES DISCOVERED.								TOTAL.	DEATHS.								TOTAL	
		Unvaccinated.				Pre-vaccinated.					Unvaccinated.				Pre-vaccinated.					
		Europ.		Col.		Europ.		Col.			Europ.		Col.		Europ.		Col.			
		M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.		
A.—TEMBULAND.																				
St. Marks	...	4	...	...	7	13	...	...	...	...	20	...	...	2	...	...	...	...	...	2
C.—PONDOLAND.																				
Bizana	...	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
D.—GRIQUALAND EAST																				
Mount Currie	...	5	...	...	...	...	...	...	9	12	21	...	...	...	...	...	...	...	...	...
Matatiele	...	3	...	...	20	31	...	...	3	...	54	...	...	...	...	...	...	...	...	...
Tsolo	...	4	...	...	3	2	...	...	2	...	7	...	...	...	...	...	...	...	...	...
Umzimkulu	...	21	...	...	26	11	...	...	2	2	41	...	...	3	...	...	...	...	...	3
Total	...	38	...	...	57	57	...	...	16	14	144	...	...	5	...	...	...	...	...	5

Summary.

	Cases.	Deaths.	Mortality %
Unvaccinated	114	5	4.39 %
Pre-vaccinated	30	...	...
Total	144	5	3.47 %

“NIL” B. Returns (Smallpox) received from the following Districts of the Native Territories.

A.—TEMBULAND.	B.—TRANSKEI.	C.—PONDOLAND.	D.—GRIQUALAND EAST.
Elliot.	Butterworth.	Flagstaff.	Maclear.
Elliotdale.	Idutywa.	Libode.	Mount Ayliff.
Engcobo.	Kentani.	Ngqeleni.	Mount Fletcher.
Mqanduli.	Nqamakwe.	Tabankulu.	Mount Frere.
Port St. John's.	Tsomo.	Lusikisiki.	Qumbu.
Umtata	Willowvale.		Walfish Bay.
Nalanga.			

## REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

## ANNEXURE "B"

TABLE 3.

RETURN of Public Vaccination showing for each district of the Colony Proper the number of Centres visited and the number of Vaccinations performed during the half-year ended 30th June, 1904.

DISTRICT.	Number of Centres at which Vaccination was performed.	Number of persons Vaccinated by the District Surgeon.	Number of persons Vaccinated by Laymen under instructions of the District Surgeon.	Total number of persons Vaccinated.	Age.		Believed to be successful.				Unsuccessful.				Number of Primary Vaccinations.	Number of Re-Vaccinations.	
					Persons over 10 years of age.	Children under 10 years of age.	Males.		Females.		Males.		Females.				
							E.	C.	E.	C.	E.	C.	E.	C.			
Aberdeen .. ..	1	44	..	44	41	3	9	Unkn	own	..	2	..	..	..	..	3	41
Albany .. ..	1	25	..	25	7	18	..	5	9	..	..	..	..	..	..	18	7
Venterstad (Albert)	1	108	..	108	63	45	..	Unkn	own	..	..	..	..	..	..	36	72
Aliwal North ..	7	315	..	315	147	168	..	Unkn	own	..	..	..	..	..	..	188	127
Lady Grey .. ..	5	301	..	301	123	178	..	Unkn	own	..	..	..	..	..	..	59	242
Barkly East .. ..	1	..	1	1	..	1	..	..	..	..	1	..	..	..	..	1	..
Beaufort West ..	2	12	..	12	2	10	..	Unkn	own	..	..	..	..	..	..	10	2
Bedford .. ..	8	184	10	194	62	132	About 75 per cent.				..	..	..	..	133	61	
Bredasdorp .. ..	1	7	..	7	..	7	..	2	..	3	..	..	1	1	7	..	..
Britstown .. ..	31	377	..	377	96	281	30	170	30	147	..	..	..	..	300	77	..
De Aar .. ..	38	236	..	236	104	132	..	117	..	119	..	..	..	..	103	133	..
Caledon .. ..	5	540	..	540	67	473	..	Unkn	own	..	..	..	..	..	390	150	..
Calvinia .. ..	1	9	..	9	9	..	..	5	..	..	4	..	..	..	6	3	..
Cape .. ..	7	431	..	431	47	384	135	97	89	101	1	2	2	4	410	21	..
Durbanville .. ..	9	245	..	245	80	165	..	Unkn	own	..	..	..	..	..	166	79	..
Carnarvon .. ..	13	413	..	413	178	235	..	Unkn	own	..	..	..	..	..	282	131	..
Clanwilliam .. ..	1	21	..	21	21	..	..	17	..	4	..	..	..	..	12	9	..
Colesberg .. ..	6	613	..	613	282	331	22	250	14	318	..	5	..	4	268	345	..
East London .. ..	1	92	..	92	23	69	47	1	43	1	..	..	..	..	79	13	..
Fraserburg .. ..	6	109	..	109	12	97	25	16	35	33	..	..	..	..	105	4	..
George .. ..	11	557	..	557	40	517	136	144	110	167	..	..	..	..	551	6	..
Glen Grey .. ..	6	203	249	452	69	383	..	Unkn	own	..	..	..	..	..	311	141	..
Graaff-Reinet ..	1	249	..	249	180	69	..	Unkn	own	..	..	..	..	..	40	209	..
New Bethesda ..	1	21	..	21	12	9	5	..	16	..	..	..	..	..	10	11	..
Herbert .. ..	1	21	..	21	19	2	2	6	..	..	2	11	..	..	6	15	..
Herschel .. ..	2	296	..	296	96	200	..	..	..	..	..	..	..	..	200	96	..
Hope Town .. ..	1	10	..	10	10	..	..	1	..	..	9	..	..	..	9	1	..
Humansdorp .. ..	9	199	..	199	11	188	25	87	9	78	..	..	..	..	199	..	..
Jansenville .. ..	1	10	..	10	4	6	2	2	3	3	..	..	..	..	9	1	..
Kenhardt .. ..	2	40	..	40	38	2	19	10	..	5	..	6	..	..	7	33	..
*Kimderley .. ..	2	1,284	..	1,284	871	413	12	986	2	284	..	..	..	..	960	324	..
Keiskama Hoek (King William's Town)	9	1,012	..	1,012	441	571	..	..	..	..	..	..	..	..	365	647	..
Middelburg (King William's Town)	13	1,048	..	1,048	183	865	..	..	..	..	..	..	..	..	823	225	..
Knysna .. ..	13	263	..	263	12	251	69	61	55	78	..	..	..	..	262	1	..
Ladismith .. ..	5	210	..	210	23	187	62	51	49	48	..	..	..	..	203	7	..
Mafeking .. ..	1	103	..	103	45	58	38	..	47	..	5	..	13	..	100	3	..
Malmesbury .. ..	3	128	4	132	57	75	..	Unkn	own	..	..	..	..	..	91	41	..
Montagu .. ..	1	2	..	2	2	..	..	2	..	..	..	..	..	..	..	2	..
Mossel Bay .. ..	25	340	..	340	69	271	94	72	96	78	..	..	..	..	271	69	..
Namaqualand .. ..	4	273	..	273	132	141	25	130	24	94	..	..	..	..	194	79	..
Oudtshoorn .. ..	4	507	..	507	229	278	12	304	14	177	..	..	..	..	192	315	..
Paarl .. ..	1	141	..	141	12	129	6	56	7	72	..	..	..	..	141	..	..
Wellington .. ..	4	435	..	435	74	361	..	..	..	..	..	..	..	..	389	46	..
Peddie .. ..	18	768	..	768	168	600	..	Unkn	own	..	..	..	..	..	450	318	..
Porterville (Piquetberg)	7	189	..	189	68	121	..	Unkn	own	..	..	..	..	..	156	33	..
Port Elizabeth ..	2	78	..	78	74	4	7	18	1	1	12	36	..	3	4	74	..
New Brighton ..	1	5	..	5	4	1	..	3	..	2	..	..	..	..	1	4	..
Port Nolloth ..	1	61	..	61	51	10	..	Unkn	own	..	..	..	..	..	7	54	..
Laingsburg (Prince Albert)	1	7	..	7	2	5	..	3	..	4	..	..	..	..	7	..	..
Queenstown .. ..	1	3	..	3	..	3	1	..	2	..	..	..	..	..	3	..	..
Richmond .. ..	12	281	..	281	129	152	26	143	16	96	..	..	..	..	152	129	..
Riversdale .. ..	2	14	..	14	8	6	3	8	3	..	..	..	..	..	14	..	..
Robertson .. ..	2	111	..	111	16	95	21	18	45	27	..	..	..	..	111	..	..
Simon's Town ..	4	105	..	105	13	92	18	26	26	35	..	..	..	..	93	12	..
Somerset West (Stellenbosch)	1	..	45	45	45	..	7	33	..	2	..	3	..	..	..	45	..
Steytlerville ..	2	38	..	38	23	15	..	2	2	4	4	13	4	9	8	30	..
Stutterheim .. ..	2	200	200	400	130	270	..	Unkn	own	..	..	..	..	..	232	168	..
Sutherland .. ..	21	187	..	187	30	157	..	Unkn	own	..	..	..	..	..	187	..	..
Tulbagh .. ..	4	149	..	149	9	140	23	46	19	54	1	2	..	4	134	15	..
Uniondale .. ..	16	1,111	..	1,111	148	963	..	Unkn	own	..	..	..	..	..	939	172	..
Victoria East ..	22	959	..	959	64	895	6	466	10	477	..	..	..	..	910	49	..
Victoria West ..	1	49	..	49	1	48	4	12	15	18	..	..	..	..	49	..	..
Vosburg .. ..	1	178	..	178	38	140	75	40	41	20	2	..	..	..	176	2	..
Willowmore .. ..	14	1,278	..	1,278	760	516	334	326	270	348	..	..	..	..	620	658	..
Worcester .. ..	1	28	..	28	4	24	..	Unkn	own	..	..	..	..	..	28	..	..
Total .. ..	401	17,233	509	17,742	5,778	11,964	..	..	..	..	..	..	..	..	12,190	5,552	..

\* Including Beaconsfield.

"NIL" D Returns (Vaccination) received from the following districts of the Colony Proper:—

Albert.	Maelean Town (East London.)	Warrenton (Kimberley.)	Philipstown.	Steynsburg.
Alexandria.	Fort Beaufort.	King William's Town.	Petrusville.	Stoekenstrom.
Jamestown (Aliwal North.)	Adelaide.	Komgha.	Piquetberg.	Swellendam.
Rhodes (Barkly East.)	Williston (Fraserburg.)	Kuruman.	Prieska.	Barrydale.
Barkly West.	Gordonia.	Hopefield (Malmesbury).	Prince Albert.	Tarka.
Hanover.	Hay.	Middelburg.	Sterkstroom (Queens-town.)	Taung.
Bathurst.	Postmasburg.	Molteno.	Whittlesea (Queens-town.)	Uitenhage.
Cathcart.	Strydenburg (Hope Town.)	Murraysburg.	Somerset East.	Van Rhynsdorp.
Ceres.	Kakamas (Kenhardt.)	Calitzdorp (Oudtshoorn.)	Pearston.	Vryburg.
Cradoek.			Stellenbosch.	Wodehouse.
Maraisburg.				Indwe.
				Wynberg.
				Mowbray.



REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

TABLE 4.

RETURN of Public Vaccination showing for each District of the Native Territories the Number of Centres Visited and the Number of Vaccinations performed during the Half-Year ended 30th June, 1904.

DISTRICT.	Number of Centres at which Vaccination was performed.	Number of Persons Vaccinated by the District Surgeon.	Number of Persons Vaccinated by Laymen under instructions of the District Surgeon.	AGE.		Total Number of Persons Vaccinated.	BELIEVED TO BE SUCCESSFUL.				UNSUCCESSFUL.				Number of Primary Vaccinations.	Number of Re-vaccinations.
				Persons over 10 Years of Age.	Children under 10 Years of Age.		Males.		Females.		Males.	Females.				
							E.	C.	E.	C.		E.	C.			
A. <i>Tembuland.</i>	9	1,068	...	385	683	1,068	...	484	...	...	...	...	...	626	442	
Engcobo ...	1	244	...	96	148	244	About 95 per cent.							Unknown		
St. Mark's ...																
C. <i>Pondoland.</i>	1	40	...	30	10	40	...	Unknown	...	...	...	...	...	8	32	
Bizana ...																
B. <i>Griqualand East.</i>	2	440	...	173	267	440	...	Unknown	...	...	...	...	...	273	167	
Mount Currie ...	2	132	...	45	87	132	...	80	...	52	...	...	...	102	30	
Matatiele ...	3	1,376	...	498	878	1,376	...	657	...	719	...	...	...	776	600	
Mount Frere ...	12	3,753	...	1,945	1,808	3,753	...	Unknown	...	...	...	...	...	1,405	2,348	
Qumbu ...	6	190	...	22	168	190	...	166	...	24	...	...	...	68	122	
Tsolo ...	13	903	...	466	437	903	...	Unknown	...	...	...	...	...	455	448	
Umsinkulu ...																
Total ...	49	8,146	...	3,660	4,486	8,146	...	...	...	...	...	...	...	3,713	4,189*	

\* Plus 244 vaccinations at St. Mark's, the number of primary and re-vaccinations being unknown.

From the following Districts of the Native Territories "NIL" Returns have been received :—

A. <i>Pondoland.</i>	B. <i>Transkei.</i>	C. <i>Pondoland.</i>	D. <i>Griqualand East.</i>
Elliot. Elliotdale. Mqanduli. Port St. John's. Umtata. Xalanga.	Butterworth. Idutywa. Kentani. Ngqamakwe. Tsomo. Willowvale.	Flagstaff. Libode. Ngqeleni. Tabankulu. Lusikisiki.	Maclear. Mount Ayliff. Mount Fletcher. Walfish Bay.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."

TABLE 5.

STATEMENT compiled from Returns rendered by the different Resident Magistrates showing the Expenditure incurred in the districts of the Colony Proper, (a) Directly by Government,

DISTRICT.	Combined Total of Expenditure incurred by Government and Local Authority.	(a) DIRECTLY BY GOVERNMENT.														Total.
		Special Allowances or Payments to District Surgeon (exclusive of Vaccination.)	Travelling Allowances to District Surgeon (exclusive of Vaccination.)	Payments to Private Practitioners.	Travelling Allowances to District Surgeon while Vaccinating.	Special Allowances (if any) to District Surgeon for Vaccinating.	Payments to Lay-Vaccinators.	Payments to Nurses, Guards, Police, &c.	Cost of Provisions and Supplies.	Cost of Construction, Purchase or Rent of Hospital Buildings, Huts, Tents, &c.	Cost of Bedding, Clothing, Furniture, Utensils, and Equipment.	Cost of Medicines.	Transport of Patients, Supplies, &c.	Payments made in respect of Compensation for infected Private Property destroyed.	Miscellaneous Expenses.	
Aberdeen ..	£ s. d. 3 0 0	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. ..	£ s. d. 3 0 0
Venterstad (Albert)	71 3 8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aliwal North	20 14 0	..	..	..	20 14 0	..	..	..	..	..	..	..	..	..	..	20 14 0
Lady Grey..	12 15 0	..	3 0 0	..	9 15 0	..	..	..	..	..	..	..	..	..	..	12 15 0
Bedford ..	25 8 6	..	..	..	25 8 6	..	..	..	..	..	..	..	..	..	..	25 8 6
Britstown at De Aar.	24 1 0	..	..	..	24 1 0	..	..	..	..	..	..	..	..	..	..	24 1 0
Caledon ..	25 11 6	..	..	..	25 11 6	..	..	..	..	..	..	..	..	..	..	25 11 6
Cape ..	1,548 5 5	..	..	..	23 5 0	..	..	..	..	..	..	..	..	..	..	23 5 0
Durbanville	47 0 4	..	..	..	28 19 0	..	..	..	..	..	..	..	..	..	..	28 19 0
Carnarvon ..	75 2 4	..	..	..	26 5 6	..	..	..	..	..	..	..	..	..	..	26 5 0
Colesberg ..	67 5 6	..	..	..	..	..	..	45 6 0	34 8 10	..	..	0 4 6	..	..	..	79 19 4
East London..	79 19 4	..	..	..	40 2 6	..	..	..	..	..	..	..	..	..	..	40 2 6
Fraserburg ..	40 2 6	..	..	..	23 8 6	..	..	..	..	..	..	..	..	..	..	23 8 6
George ..	23 8 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glen Grey ..	96 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Graaff Reinet	59 17 2	..	..	..	..	..	..	42 0 0	..	..	..	..	..	..	..	64 10 0
Herschel ..	64 10 0	..	22 10 0	..	..	..	..	..	..	..	..	..	..	..	..	51 19 6
Humansdorp	51 19 6	..	..	..	51 19 6	..	..	..	..	..	..	..	..	..	..	29 12 6
Kimberley..	29 12 6	..	..	..	29 12 6	..	..	..	..	..	..	..	..	..	..	60 18 0
Keiskama	60 18 0	..	..	..	60 18 0	..	..	..	..	..	..	..	..	..	..	66 13 6
Hoek (KWT)	66 13 6	..	..	..	66 13 6	..	..	..	..	..	..	..	..	..	..	17 14 0
Middledrift (K W T)	17 14 0	..	..	..	17 14 0	..	..	..	..	..	..	..	..	..	..	15 18 0
Knysna ..	15 18 0	..	..	..	15 18 0	..	..	..	..	..	..	..	..	..	..	3 15 0
Ladismith ..	627 5 10	3 15 0	..	..	..	..	..	..	..	..	..	..	..	..	..	21 10 0
Malmesbury..	21 10 0	..	..	..	21 10 0	..	..	..	..	..	..	..	..	..	..	6 15 0
Mossel Bay ..	115 8 9	..	..	..	6 15 0	..	..	..	..	..	..	..	..	..	..	3 15 0
Namaqualand	14 12 1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43 7 0
Oudtshoorn ..	38 6 2	..	..	..	3 15 0	..	..	..	..	..	..	..	..	..	..	18 15 0
Paarl ..	3 15 0	..	..	..	43 7 0	..	..	..	..	..	..	..	..	..	..	29 12 6
Wellington..	43 7 0	..	..	..	18 15 0	..	..	..	..	..	..	..	..	..	..	3 0 0
Peddie ..	18 15 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10 17 6
Porterville (Piquetberg)	4 10 0	..	..	..	29 12 6	..	..	..	..	..	..	..	..	..	..	2 12 6
Queenstown..	29 12 6	..	..	..	3 0 0	..	..	..	..	..	..	..	..	..	..	34 17 1
Richmond ..	3 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9 0 0
Riversdale ..	14 4 2	..	..	..	10 17 6	..	..	..	..	..	..	..	..	..	..	43 1 0
Robertson ..	10 17 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55 16 0
Simon's Town	14 0 6	..	..	..	2 12 6	..	..	..	..	..	..	..	..	..	..	49 11 6
Steytlerville	100 9 2	..	..	..	34 17 1	..	..	..	..	..	..	..	..	..	..	..
Stutterheim ..	34 17 1	..	..	..	9 0 0	..	..	..	..	..	..	..	..	..	..	..
Sutherland ..	9 0 0	..	..	..	43 1 0	..	..	..	..	..	..	..	..	..	..	..
Tulbagh ..	43 1 0	..	..	..	55 16 0	..	..	..	..	..	..	..	..	..	..	..
Uniondale ..	99 3 6	..	..	..	49 11 6	..	..	..	..	..	..	..	..	..	..	..
Victoria East	49 11 6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willowmore..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	3,822 7 0	3 15 0	28 10 0	..	822 15 7	..	..	87 6 0	34 8 10	..	..	0 4 6	..	..	..	976 19 11

"NIL" C Returns (Smallpox and Vaccination expenditure) have been

- Albany  
Albert  
Alexandria  
Barkly East  
Barkly West  
Klipdam  
Bathurst  
Beaufort West  
Bredasdorp  
Britstown  
Calvinia  
Cathcart  
Ceres  
Clanwilliam  
Cradoek  
Maraisburg
- Fort Beaufort  
Adelaide  
Williston (Fraserburg)  
Gordonia  
Hanover  
Hay  
Herbert  
Hope Town  
Jansenville  
Kenhardt  
Kakamas  
King William's Town  
Komgha  
Kuruman  
Mafeking  
Hopefield (Malmesbury)



REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "B."—Continued.

TABLE 5.—Continued

during the half year ended 30th June 1904, under the Health Act, 1883, in dealing with Small-pox in the several and (b) directly by Local Authority.

(b) DIRECTLY BY LOCAL AUTHORITY.																
DISTRICT.	Special Allowances or Pay- ments to District Surgeon (exclusive of Vaccination).	Travelling Allowances to Dis- trict Surgeon (exclusive of Vaccination).	Payments to Private Practi- tioners.	Travelling Allowances to Dis- trict Surgeon while Vaccina- ting.	Special Allowances (if any) to District Surgeon for Vac- cinating.	Payments to Lay Vaccinators.	Payments to Nurses, Guards, Police, &c.	Cost of Provisions and Sup- plies.	Cost of Construction, Pur- chase, or Rent of Hospital Buildings, Huts, Tents, &c.	Cost of Bedding, Clothing, Furniture, Utensils and Equipment.	Cost of Medicines.	Transport of Patients, Sup- plies, &c.	Payments made in respect of Compensation for infected Private Property destroyed.	Miscellaneous Expenses.	Total.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Aberdeen ..	39 15 0	..	..	..	..	..	17 8 0	11 18 5	..	1 16 0	..	..	..	0 6 3	71 3 8	
Venterstad (Albert)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Aliwal North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Lady Grey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Bedford ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Britstown at De Aar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Caledon ..	9 0 0	21 0 0	0 125 2 6	9 15 0	1 10 0	..	48 14 8	105 18 5	479 9 11	11 15 3	21 1 9	168 4 6	2 7 0	144 6 5	1,548 5 5	
Cape ..	..	15 17 6	..	..	..	..	4 0 6	4 5 4	..	..	..	..	..	0 2 0	23 15 4	
Durbanville	26 17 6	..	..	..	..	..	3 13 6	15 12 4	..	..	..	..	..	..	46 3 4	
Carnarvon ..	6 15 0	..	..	..	..	..	9 7 6	7 8 6	8 5 6	7 14 0	..	1 10 0	..	..	41 0 6	
Colesberg ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
East London..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Fraserburg ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
George ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Glen Grey ..	..	32 12 0	..	..	..	..	54 15 0	9 3 0	..	..	..	..	..	..	96 0 0	
Graaff Reinet	..	..	34 13 0	..	..	..	5 0 0	9 0 8	..	0 13 6	10 10 0	..	..	..	59 17 2	
Herschel ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Humansdorp	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Kimberley ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Keiskama	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hoek (KWT)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Middeldrift (K W T)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Knysna ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Ladismith ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Malmesbury..	..	110 0 0	..	..	..	..	125 0 0	145 0 0	188 7 3	..	17 2 6	34 13 7	3 7 6	..	623 10 10	
Mossel Bay ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Namaqualand	..	68 7 6	1 5 0	..	..	..	26 15 6	16 3 0	..	0 12 9	..	2 5 0	..	..	115 8 9	
Oudtshoorn ..	..	4 5 0	..	..	..	..	..	3 12 1	..	..	..	..	..	..	7 17 1	
Paarl ..	..	..	..	..	..	..	18 15 3	19 4 11	..	..	..	..	..	0 6 0	38 6 2	
Wellington..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Peddie ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Porterville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(Piquetberg)	..	..	..	..	..	..	..	..	4 10 0	..	..	..	..	..	4 10 0	
Queenstown ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Richmond ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Riversdale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Robertson ..	2 5 0	4 10 0	0 7 6	..	..	..	0 12 0	1 9 8	5 0 0	..	..	..	..	..	14 4 2	
Simon's Town	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Steytlerville..	..	5 12 6	..	1 17 6	..	..	..	..	..	..	1 17 6	0 15 0	..	3 18 0	14 0 6	
Stutterheim ..	..	44 12 6	..	..	..	..	31 17 0	15 1 2	1 11 0	..	..	4 15 0	..	..	97 16 8	
Sutherland ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Tulbagh ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Uniondale ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Victoria East	..	7 10 0	..	..	..	..	35 17 6	..	..	..	..	..	..	..	43 7 6	
Willowmore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total.....	84 12 6	313 7 0	161 8 0	11 12 6	1 10 0	..	781 16 5	363 17 6	687 3 8	22 11 6	50 11 9	212 3 1	5 11 6	148 18 8	2,845 7 1	

received from the following Districts of the Colony Proper :—

- Middelburg  
Molteno  
Montagu  
Murraysburg  
Calitzdorp (Oudtshoorn)  
Philipstown  
Petrusville  
Piquetberg  
Port Elizabeth  
New Brighton  
Port Nolloth  
Prieska  
Prince Albert  
Laingsburg  
Sterkstroom (Queenstown)  
Somerset East  
Pearston
- Stellenbosch  
Somerset West  
Steynsburg  
Stockenstrom  
Swellendam  
Tarka  
Taung  
Uitenhage  
Van Rhynsdorp  
Victoria West  
Vryburg  
Wodehouse  
Indwe  
Worcester  
Wynberg

ANNEXURE "B."  
TABLE 6.

STATEMENT compiled from returns rendered by the different Resident Magistrates showing the Expenditure incurred during the half-year ended 30th June, 1904, under the Health Act, 1883, in dealing with Small-pox in the several districts of the Native Territories, (a) directly by Government, and (b) directly by Local Authority.

(a) DIRECTLY BY GOVERNMENT.														
DISTRICT.	Combined Total of Expendi- ture in- curred by Govern- ment and Local Authority.	Special al- lowances or payments to District Surgeon (exclusive of Vaccina- tion.)	Travelling allowances to District Surgeon (exclusive of Vaccina- tion.)	Payments to Private Practi- tioners.	Travelling allowances to District Surgeon while Vac- cinating.	Special allowances (if any) to District Surgeon for Vaccin- ating.	Payments to Lay Vaccina- tors.	Payments to Nurses, Guards, Police, etc.	Cost of Provisions and Supplies.	Cost of con- struction, purchase, or rent of Hospital Buildings, Huts, etc.	Cost of Bedding, Clothing, Furniture, Utensils, and Equip- ment.	Cost of Medicines.	Transport of Patients, Supplies, etc.	Payments made in respect of compen- sation for infected private property destroyed.
A.—TEMBULAND.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Engcobo ..	28 4 6	..	..	..	28 4 6	..	..	..	..	..	..	..	..	28 4 6
St. Mark's ..	21 18 0	6 15 0	10 2 6	..	1 10 0	3 10 6	..	..	..	..	..	..	..	21 18 0
C.—PONDOLAND	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bizana ..	4 18 4	..	..	..	..	..	..	3 0 0	0 11 1	..	0 14 9	..	..	4 18 4
D.—GRIQUALAND EAST.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Kokstad ..	166 11 10	..	..	..	149 17 0	..	0 13 6	..	..	..	..	..	..	150 10 6
Matatiele ..	9 3 0	..	9 3 0	..	..	..	..	..	..	..	..	..	..	9 3 0
Mount Frere ..	4 8 6	..	..	..	4 8 6	..	..	..	..	..	..	..	..	4 8 6
Qumbu ..	7 17 6	..	..	..	7 17 6	..	..	..	..	..	..	..	..	7 17 6
Tsolo ..	58 16 1	42 15 0	15 10 6	..	..	..	..	..	..	..	..	..	..	58 5 6
Umzimkulu ..	88 3 6	..	18 6 0	..	66 7 6	..	3 2 6	..	..	..	..	..	..	88 3 6
Total ..	391 1 3	49 10 0	53 2 0	..	258 5 0	3 10 6	3 16 0	3 0 0	0 11 1	..	0 14 9	..	..	373 9 4

(b) DIRECTLY BY LOCAL AUTHORITY.														
DISTRICT.	Special allowances or pay- ments to District Surgeon (exclusive of Vaccina- tion.)	Travelling allowance to District Surgeon (exclusive of Vaccina- tion.)	Payments to Private Practi- tioners.	Travelling allowances to District Surgeon while Vac- cinating.	Special allowances (if any) to District Surgeon for Vaccin- ating.	Payments to Lay Vaccin- ators.	Payments to Nurses, Guards, Police, etc.	Cost of Provisions and Supplies.	Cost of con- struction, purchase, or rent of Hospital Buildings, Huts, etc.	Cost of Bedding, Clothing, Furniture, Utensils, and Equip- ment.	Cost of Medicines.	Transport of Patients, Supplies, etc.	Payments made in respect of compensa- tion for infected private property destroyed.	Total.
A.—TEMBULAND.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Engcobo ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Mark's ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
C.—PONDOLAND.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bizana ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
D.—GRIQUALAND EAST.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Kokstad ..	8 5 0	..	..	..	..	..	5 11 0	1 12 10	..	0 12 6	..	..	..	16 1 4
Matatiele ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Frere ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Qumbu ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tsolo ..	..	1 10 7	..	..	..	..	..	..	..	..	..	..	..	1 10 7
Umzimkulu ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	8 5 0	1 10 7	..	..	..	..	5 11 0	1 12 10	..	0 12 6	..	..	..	17 11 11

"NIL" C Returns (Small-pox and Vaccination Expenditure) have been received from the following districts of the Native Territories:-

- A.—TEMBULAND.  
Elliot.  
Elliotdale.  
Mqanduli.  
Port St. John's.  
Untata.  
Xalanga.

B.—TRANSKEI.  
Butterworth.  
Idutywa.  
Kentani.  
Nqamakwe.  
Tsono.  
Willowvale.

C.—PONDOLAND.  
Flagstaff.  
Libode.  
Ngqeleni.  
Tabankulu.  
Lusikisiki.

D.—GRIQUALAND EAST.  
Maclear.  
Mount Ayliff.  
Mount Fletcher.  
WALFISH BAY.





REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "C."—Continued.

TABLE 1.—Continued.

RETURN showing the Number of Lepers on the Register in each District of the Colony Proper, and the manner in which they were dealt with during the half year ended 30th June, 1904.

DISTRICT.	FORM OF DISEASE.	RACE.	E. or C.		Total number of Cases on the Register during half-year ended 30th June, 1904.		Number living in the District and on the register on the 31st December, 1903.		Number of Fresh Cases registered during half-year ended 30th June, 1904.		Number removed from the register during half-year ended 30th June, 1904.								Number remaining on the Register and being still in the district on the 30th June, 1904.	
			M	F	M	F	M	F	Sent to Asylum.		Died.	Disappeared or Absconded.	Disease arrested or in abeyance.	Found not to be suffering from Leprosy.		M	F			
									M	F				M	F					
Peddio .. ..	Mixed .. ..	C	..	2	..	..	..	2	..	..	..	..	..	..	..	..	..	2		
Piquetberg .. ..	Mixed .. ..	E	1	..	1	..	..	1	..	1	..	..	..	..	..	1	..	..		
Port Elizabeth .. ..	Tubercular .. ..	C	1	1	..	..	..	1	1	1	..	..	..	..	..	1	..	..		
Riversdale .. ..	Mixed .. ..	E	..	1	..	..	..	1	..	1	1	..	..	..	..	..	..	..		
Simon's Town .. ..	Tubercular .. ..	C	..	2	..	..	..	2	2	2	..	..	..	..	..	..	..	..		
Somerset East .. ..	Tubercular .. ..	C	1	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..		
Stellenbosch .. ..	Tubercular .. ..	E	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..		
.. ..	Unknown .. ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..		
Stockenstrom .. ..	Anæsthetic .. ..	C	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..		
Taung .. ..	Anæsthetic .. ..	C	..	1	..	..	..	1	1	1	..	..	..	..	..	..	1	..		
Uitenhage .. ..	Anæsthetic .. ..	C	1	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..		
Victoria East .. ..	Tubercular .. ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..		
.. ..	Anæsthetic .. ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..		
Willowmore .. ..	Mixed .. ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..		
Wodehouse .. ..	Anæsthetic .. ..	C	..	2	..	..	..	2	1	1	..	..	..	..	..	..	1	..		
.. ..	Mixed .. ..	C	1	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..		
Worcester .. ..	Tubercular .. ..	C	..	1	..	1	1	..	..	..	..	..	..	..	..	..	1	1		
Wynberg .. ..	Tubercular .. ..	C	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	1		
.. ..	Anæsthetic .. ..	C	2	1	2	1	..	..	1	..	..	..	..	..	..	1	..	1		
.. ..	Mixed .. ..	C	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..		
TOTAL .. ..	.. ..	..	147	108	112	87	35	21	26	11	5	1	4	1	1	..	111	95		

"NIL" G (Leper) Returns have been received from the following Districts of the Colony Proper:—

Aberdeen	Kenhardt	Prince Albert
Venterstad (Albert)	Kakamas	Laingsburg
Aliwal North	Kciskama Hock (King William's Town)	Queenstown
Lady Grey	Knysna	Sterkstroom
Klipdam (Barkly West)	Kuruman	Richmond
Bedford	Ladismith	Robertson
Bredasdorp	Mateking	Pearston (Somerset East)
Britstown	Molteno	Somerset West (Stellenbosch)
De Aar	Montagu	Steynsburg
Durbanville (Cape)	Mossel Bay	Steytlerville
Carnarvon	Murraysburg	Stutterheim
Catheart	Namaqualand	Sutherland
Clanwilliam	Oudtshoorn	Swellendam
Colesberg	Calitzdorp (Oudtshoorn)	Tarka
Adelaide (Fort Beaufort)	Philipstown	Tulbagh
Williston (Fraserburg)	Petrusville	Uniondale
Gordonia	Porterville (Piquetberg)	Van Rhynsdorp
Graaff-Reinet	New Brighton (Port Elizabeth)	Victoria West
Hay	Port Nolloth	Vryburg
Hope Town	Prieska	Indwe (Wodehouse)
Jansenville		



## REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

## ANNEXURE "C."

TABLE 2.

RETURN showing the number of lepers on the Register in each district of the Native Territories, and the manner in which they were dealt with during the half-year ended 30th June, 1904.

DISTRICT.	FORM OF DISEASE.	RACE.	Total number of Cases on the Register during half-year ended 30th June, 1904.		Number living in the District and on the Register on the 31st December, 1903.		Number of Fresh Cases registered during half-year ended 30th June, 1904.		Number removed from the Register during the half-year ended 30th June, 1904.								Number remaining on the Register and being still in the District on the 30th June, 1904.				
			M	F	M	F	M	F	Sent to Asylum.	Died.	Disappeared or Ab-sconded.				Disease arrested or in abeyance.				Found not to be suffering from Leprosy.	M	F
											M	F	M	F	M	F	M	F			
A.—TEMBULAND.																					
Elliotdale .. ..	Anæsthetic .. ..	C	4	..	3	..	1	..	..	..	..	..	..	..	4	..					
Engcobo .. ..	Mixed .. ..	C	3	1	2	1	1	..	..	..	..	..	..	3	1	..					
	Tubercular .. ..	C	13	8	13	5	..	3	..	1	..	..	..	13	7	..					
Mqanduli .. ..	Anæsthetic .. ..																				
St. Mark's .. ..	Mixed .. ..	C	1	2	4	2	..	..	..	1	1	..	..	3	1	..					
	Tubercular .. ..	C	1	..	1	..	..	..	..	1	..	..	..	..	..	..					
Umtata .. ..	Anæsthetic .. ..	C	1	5	1	3	..	2	..	1	1	..	1	..	3	..					
	Mixed .. ..	C	..	..	..	..	..	..	..	1	..	1	..	..	..	..					
Xalanga .. ..	Mixed .. ..	C	1	2	..	2	1	..	..	1	..	..	..	1	1	..					
B.—TRANSKEI.																					
Butterworth .. ..	Mixed .. ..	C	10	6	10	6	..	..	..	..	..	..	..	10	6	..					
Idutywa .. ..	Tubercular .. ..	C	1	..	..	..	1	..	1	..	..	..	..	..	..	..					
	Anæsthetic .. ..	C	2	1	2	1	..	..	..	..	..	..	..	2	1	..					
Kentani .. ..	Mixed .. ..	C	13	10	13	9	..	1	..	1	..	..	..	12	10	..					
	Anæsthetic .. ..	C	12	8	7	3	5	5	1	2	..	3	1	8	5	..					
Nqamakwe .. ..	Mixed .. ..	C	3	1	2	1	1	..	1	..	1	..	2	1	..	..					
Tsomo .. ..	Mixed .. ..	C	8	8	7	8	1	..	1	..	1	..	..	7	8	..					
Willowvale .. ..	Mixed .. ..	C	6	2	5	2	1	..	3	1	..	..	..	3	1	..					
	Tubercular .. ..	C	2	1	..	..	2	1	..	..	..	..	..	2	1	..					
	Anæsthetic .. ..	C	..	1	..	..	..	1	..	1	..	..	..	..	..	..					
	Mixed .. ..	C	2	..	..	..	2	..	2	..	2	..	..	..	..	..					
C.—PONDOLAND.																					
Libode .. ..	Tubercular .. ..	C	1	1	..	1	1	..	1	..	1	..	..	..	1	..					
Ngqeleni .. ..	Mixed .. ..	C	..	1	..	1	..	..	..	..	1	..	..	..	..	..					
	Tubercular .. ..	C	1	..	1	..	..	..	..	..	..	..	..	1	..	..					
Tabankulu .. ..	Mixed .. ..	C	1	..	1	..	..	..	..	..	..	..	..	1	..	..					
Lusikisiki .. ..	Anæsthetic .. ..	C	1	..	..	..	1	..	..	..	..	..	..	1	..	..					
	Anæsthetic .. ..	C	3	2	3	2	..	..	..	..	..	..	..	3	2	..					
D.—GRIQUALAND EAST.																					
Kokstad .. ..	Anæsthetic .. ..	C	5	11	5	11	..	..	1	1	..	..	..	3	11	..					
Maclear .. ..	Mixed .. ..	C	1	1	1	1	..	..	..	..	..	..	..	1	1	..					
	Tubercular .. ..	C	1	..	..	..	1	..	..	..	..	..	..	..	..	..					
	Anæsthetic .. ..	C	..	3	..	1	..	2	..	..	..	..	..	1	3	..					
Matatiele .. ..	Anæsthetic .. ..	C	13	5	13	4	..	1	..	2	..	..	..	11	5	..					
Mount Ayliff .. ..	Mixed .. ..	C	..	3	..	3	..	..	..	..	..	..	..	..	3	..					
Mount Fletcher .. ..	Anæsthetic .. ..	C	1	..	..	..	1	..	..	..	..	..	..	1	..	..					
	Mixed .. ..	C	4	..	2	..	2	..	..	..	..	..	..	4	..	..					
Mount Frere .. ..	Anæsthetic .. ..	C	16	4	15	4	1	..	..	..	..	..	..	16	4	..					
Qumbu .. ..	Tubercular .. ..	C	..	3	..	3	..	..	..	..	..	..	..	..	3	..					
	Anæsthetic .. ..	C	5	3	5	3	..	..	..	..	1	1	..	4	2	..					
	Mixed .. ..	C	..	2	..	..	..	2	..	..	..	1	..	..	1	..					
Tsolo .. ..	Anæsthetic .. ..	C	5	2	1	..	4	2	2	1	..	1	..	3	1	..					
Umzimkulu .. ..	Anæsthetic .. ..	C	11	1	11	4	..	..	6	1	..	..	..	5	3	..					
	Mixed .. ..	C	..	1	..	1	..	..	..	..	..	..	..	..	1	..					
Total .. ..			157	104	129	84	28	20	20	12	7	1	6	5	124	86					

"NIL" G (Leprosy) returns received from the following districts of the Native Territories:—

Elliot  
Port St. John's

Walfish Bay.

Bizana  
Flagstaff

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

ANNEXURE "D."

Statistical Returns under "The Contagious Diseases Prevention Act, 1885."

TABLE 1.

Showing the results of the working of Part I. (Females) of "The Contagious Diseases Prevention Act, 1885," in each of the Districts in which the portion of the Act is in force, during the years 1901, 1902, 1903, and the half-year ended 30th June, 1904.

	CAPE TOWN.			WYNBERG.			SIMON'S TOWN.			EAST LONDON.			KING WILLIAM'S TOWN.			PORT ELIZABETH.			UTENHAGE.			ALL DISTRICTS.						
	1901	1902	1903	Half-year, 30th June, 1904.	1901	1902	1903	Half-year, 30th June, 1904.	1901	1902	1903	Half-year, 30th June, 1904.	1901	1902	1903	Half-year, 30th June, 1904.	1901	1902	1903	Half-year, 30th June, 1904.	1901	1902	1903	Half-year, 30th June, 1904.				
Number of women remaining on the Register on 31st December of previous year.	249	229	188	19	40	39	34	37	23	41	43	42	5	10	6	5	150	112	125	100	13	13	15	15	520	488	437	265
Number of women placed on the Register	279	246	50	49	4	7	11	3	31	17	9	5	5	17	3	3	69	45	9	2	4	4	...	409	321	102	67	
Number of women removed from the Register	299	287	189	29	5	12	8	6	13	15	10	21	4	12	7	4	107	32	34	6	4	...	441	372	274	70		
Relieved by order of the Resident Magistrate.	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	5	2	1	
Died ...	7	10	6	1	1	...	3	...	2	1	...	3	...	...	...	...	2	...	...	...	...	...	...	12	12	11	4	
Removed to some known address	28	29	15	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	28	40	30	34	
Disappeared or absconded	261	247	168	27	4	10	3	5	10	14	...	18	2	12	6	2	105	32	34	6	4	...	4	396	311	229	61	
Married...	3	1	...	...	44	46	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	3	4	2	1	
Number of women examined	528	475	238	98	44	46	45	40	54	58	41	28	...	22	13	9	219	157	134	102	17	15	15	11	929	809	512	306
European	282	244	87	51	2	2	2	3	6	12	1	1	...	76	45	21	1	76	45	21	12	4	5	1	370	308	116	69
Coloured	246	231	151	47	42	44	43	37	48	46	40	27	...	22	13	9	143	112	113	90	13	10	10	10	559	501	396	237
Voluntary Submissions under Section 14 of the Act.	528	475	238	98	39	40	38	35	54	58	41	28	...	22	13	9	181	118	102	72	13	9	9	7	882	758	467	267
Compulsory Submissions under Section 10 of the Act.	...	...	...	...	5	6	7	5	...	...	...	...	...	...	...	...	38	39	32	30	4	6	6	4	47	51	45	39
Number of separate periodical examinations made.	2079	1826	995	239	1157	1230	1128	738	323	383	261	70	31	83	53	39	2467	1940	1545	748	135	122	98	60	6612	6126	4258	2044
Usual length of interval between examinations (in days).	14	14	14	21	16	13	18	18	30	30	30	30	30	30	30	30	14	14	14	14	28	28	28	28	...	...	...	...
Number of women found to be free from disease.	348	379	207	86	16	10	8	26	18	32	22	24	8	13	7	5	148	93	89	84	16	12	11	9	595	576	366	248
Number of women found to be diseased	180	96	31	12	28	36	37	14	36	26	19	4	2	9	6	4	71	64	45	18	1	3	4	2	334	233	146	58
Number of admissions into hospital ...	192	145	36	14	28	36	37	14	60	38	25	45	3	12	6	4	71	64	45	18	1	3	4	2	373	294	157	62
Nature of the disease:—																												
Syphilis: Primary ...	...	...	...	...	2	4	6	2	...	...	...	...	1	...	...	...	38	18	13	2	...	2	1	...	45	28	22	7
Secondary ...	...	...	...	...	4	6	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23	16	9	9
Tertiary ...	...	...	...	...	3	5	4	2	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	83	36	10	2
Gonorrhoea...	...	...	...	...	10	18	19	8	50	26	9	5	...	...	...	...	33	46	32	16	...	1	3	...	168	180	88	39
Other (Chancroid) Ulcer of Vulva	...	...	...	...	12	3	4	...	...	12	16	...	...	...	...	...	...	...	...	...	...	...	...	...	54	34	28	5
Cervix, &c.	...	...	...	...	35	87	56	46	48	48	38	0	28	3	36	36	27	32	36	522	27	32	36	38	37	44	32	
Average duration of stay on each admission to hospital (in days).	42	40	55	32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	3	...	...
Number of prosecutions under Section 11 of the Act.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of prosecutions under Section 17 of the Act.	23	44	8	...	11	...	4	6	7	4	...	...	...	...	...	...	36	42	47	16	4	6	2	2	95	104	62	29

\* Does not include three patients remaining under treatment on 31st December, 1903.

† Does not include two patients remaining under treatment on 31st December, 1903.

‡ There were only three actual admissions to the Hospital during the half-year, one woman was examined while a prisoner, and cured before her discharge from gaol; another woman was diseased twice, the first time while a prisoner, and treated and cured before her discharge from gaol.



ANNEXURE “D.”

Statistical Returns under “The Contagious Diseases Prevention Act, 1885.”

TABLE 2.

Comparative Table showing the Results of the Working of Part I. (Females) of “The Contagious Diseases Prevention Act, 1885.” during the years 1889, 1901, 1902, 1903 and the half-year ended 30th June, 1904.

	CAPE TOWN.				WYNBERG.				SIMON'S TOWN.				EAST LONDON.			
	1889	1901	1902	1903	Half Year ended 30th June, 1904.	1889	1901	1902	1903	Half Year ended 30th June, 1904.	1889	1901	1902	1903	Half Year ended 30th June, 1904.	
Number of individual women examined	235	528	475	238	98	56	45	45	30	17	53	44	46	45	40	
Number of separate periodical medical examinations	2,490	2,079	1,826	995	239	211	368	572	192	158	481	1,157	1,230	1,128	738	
Number of individual women found diseased	*	180	96	31	12	23	9	2	6	6	47	28	36	37	14	
Number of admissions to Hospital	120	192	145	36	14	25	9	2	6	6	127	28	36	37	14	
Average duration of stay in Hospital (in days)	72·83	42·2	40·5	55	32·1	...	...	...	...	35·8	35·0	56·0	46·0	48	38·0	
Number of voluntary submissions	*127	528	475	238	98	56	45	45	30	17	44	39	40	38	35	
Number of prosecutions under the Act	20	23	44	8	...	3	18	8	1	1	59	11	...	4	6	
Total Expenditure	£2,684 1 6	£2,451 16 2½	£2,228 4 10	£1,847 14 3	£778 7 9	£73 16 8	£174 6 9	£139 4 8	£181 7 6	£94 15 0	£653 2 9	£579 13 1	£644 1 9	£687 11 0	£298 16 3	
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(Continued.)

	KING WILLIAM'S TOWN.					PORT ELIZABETH.					UTENHAGE.					ALL DISTRICTS.				
	1889	1901	1902	1903	Half Year ended 30th June, 1904.	1889	1901	1902	1903	Half Year ended 30th June, 1904.	† 1889	1901	1902	1903	Half Year ended 30th June, 1904.	1889	1901	1902	1903	Half Year ended 30th June, 1904.
Number of individual women examined	44	22	13	9	10	113	219	157	134	102	...	17	15	15	11	510	929	809	512	306
Number of separate periodical medical examinations	180	83	53	39	31	595	2,467	1,940	1,545	748	...	135	122	98	60	*3957	6,612	61,265	42,588	2,044
Number of individual women found diseased	10	9	6	4	2	63	71	64	45	18	...	1	3	4	2	*170	334	233	146	58
Number of admissions to Hospital	48	12	6	4	3	77	71	64	45	18	...	1	3	4	2	404	373	294	157	62
Average duration of stay in Hospital (in days)	33·43	33·0	26·5	36	28·3	81·0	27·0	32·0	36·5	22·7	...	27·0	32·0	36·5	22·7	...	38	37	44	32
Number of voluntary submissions	33	22	13	9	10	89	181	118	102	72	...	13	9	9	7	*358	882	758	467	267
Number of precautions under the Act	...	5	3	...	4	58	36	42	47	16	...	4	6	2	2	130	104	107	62	29
Total Expenditure	£112 10 7	£398 6 3	£481 16 11	£321 13 0	£169 2 5	£686 4 2	£905 13 1½	£890 4 9½	£862 1 1	£361 6 2	...	£103 1 1	£102 0 7	£101 13 1	£50 15 10	£4,101 10 9	£4,692 5 5	£4,620 19 11½	£4,075 14 10	£1,786 17 2

\* Information is imperfect.

† Part I. of the Act was only proclaimed in Uitenhage in the 19th January, 1893.

ANNEXURE "D."  
Statistical Returns under "The Contagious Diseases Prevention Act, 1885."  
TABLE 3.  
Comparative Table showing in Ratios per centum the Results of the working of Part I. (Females), of "The Contagious Diseases Prevention Act, 1885," during the years 1889, 1901, 1902, 1903 and the half-year ended 30th June, 1904.

	CAPE TOWN.					WYNBERG.					SIMON'S TOWN.					EAST LONDON.				
	1889	1901	1902	1903	Half-year ended 30th June, 1904.	1889	1901	1902	1903	Half-year ended 30th June, 1904.	1889	1901	1902	1903	Half-year ended 30th June, 1904.	1889	1901	1902	1903	Half-year ended 30th June, 1904.
Proportion of separate Examinations per Woman	10·6	3·9	3·8	4·2	2·4	3·8	8·2	12·7	6·4	9·3	9·1	26·3	26·7	25·1	18·4	*	6·0	6·6	6·4	2·1
Proportion of individuals found to be diseased per centum of Women examined.	*	34·1	20·2	13·0	12·2	41·1	20·0	4·4	20·0	35·3	88·7	63·6	78·3	82·2	35·0	77·8	66·7	44·8	46·3	14·3
Proportion of separate admissions to Hospital per centum of Women examined.	51·1	36·4	30·5	15·1	14·3	44·7	20·0	4·4	20·0	35·3	209·4	63·6	78·3	82·2	35·0	77·8	111·1	65·5	61·0	17·8
Proportion of re-admissions to Hospital per centum of diseased Women.	*	6·7	51·0	16·1	16·7	8·7	0·0	0·0	0·0	0·0	136·1	0·0	0·0	0·0	0·0	0·0	66·7	46·2	31·6	25·0
Proportion of admissions to Hospital per centum of separate examinations.	4·8	9·2	7·9	3·6	5·8	11·8	2·4	0·3	3·1	3·8	23·1	2·4	2·9	3·3	1·9	*	18·6	9·9	9·6	7·1
Proportion of voluntary submissions per centum of Women examined.	*54·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	83·0	88·6	87·0	84·4	87·5	100·0	100·0	100·0	100·0	100·0
Proportion of Prosecutions per centum of Women examined	4·3	4·4	9·3	3·4	0·0	5·4	40·0	17·8	3·3	5·9	111·5	25·0	0·0	8·8	15·0	0·0	13·0	6·9	0·0	0·0

Continued.

	KING WILLIAM'S TOWN.					PORT ELIZABETH.					UITENHAGE.					ALL DISTRICTS.				
	1889	1901	1902	1903	Half-year ended 30th June, 1904.	1889	1901	1902	1903	Half-year ended 30th June, 1904.	† 1889	1901	1902	1903	Half-year ended 30th June, 1904.	1889	1901	1902	1903	Half-year ended 30th June, 1904.
Proportion of separate Examinations per Woman	4·1	3·8	4·1	4·3	3·1	5·3	11·3	12·4	11·5	7·3	...	7·9	8·1	6·5	5·4	7·9 (e)	7·1	7·6	8·3	6·6
Proportion of individuals found to be diseased per centum of Women examined.	68·2	40·9	46·2	44·4	20·0	55·7	32·4	40·8	33·6	17·6	...	5·9	20·0	26·7	18·1	61·8	36·0	28·8	28·5	19·0
Proportion of separate admissions to Hospital per centum of Women examined.	109·1	54·5	46·2	44·4	30·0	68·1	32·4	40·8	33·6	17·6	...	5·9	20·0	26·7	18·1	76·1 (e)	40·2	36·3	30·7	20·3
Proportion of re-admissions to Hospital per centum of diseased Women.	60·9	33·3	0·0	0·0	50·0	22·2	0·0	0·0	0·0	0·0	...	0·0	0·0	0·0	0·0	60·1 (f)	11·7	26·2	7·5	1·3
Proportion of admissions to Hospital per centum of separate examinations.	26·7	14·5	11·3	10·3	9·7	12·9	2·9	3·3	2·9	2·4	...	0·7	2·5	4·1	3·3	9·8 (*)	5·6	4·8	3·7	3·0
Proportion of voluntary submissions per centum of Women examined.	75·0	100·0	100·0	100·0	100·0	78·8	82·6	75·2	76·1	70·6	...	76·5	60·0	60·0	63·6	70·2	94·9	93·7	91·2	87·2
Proportion of prosecutions per centum of Women examined	0·0	22·7	23·1	0·0	40·0	51·3	16·4	20·8	35·1	15·7	...	23·5	40·0	13·3	18·1	25·5	11·2	13·2	12·1	9·5

\* Information is imperfect. † Part I. of the Act was only proclaimed in Uitenhage on the 19th January, 1893.  
(c) Excluding Cape Town, in regard to which information is imperfect. (f) Excluding East London, in regard to which information is imperfect.



TABLE 4.  
RETURN of Expenditure incurred during the years 1901, 1902, 1903 and the half year ended 30th June, 1904, in connection with Part I. of "The Contagious Diseases Prevention Act 1885," in respect of each District in which this part of the Act is in operation.

TABLE 4.

SERVICE.	CAPE TOWN.				WYNBERG.				SIMON'S TOWN.				EAST LONDON.			
	1901.	1902.	1903.	Half Year 30th June, 1904.	1901.	1902.	1903.	Half Year 30th June, 1904.	1901.	1902.	1903.	Half Year 30th June, 1904.	1901.	1902.	1903.	Half Year 30th June, 1904.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. Cost of Buildings, construction and Repairs ...	238 0 2	141 7 5	154 17 10	120 2 3	...	...	...	...	0 15 6	1 4 6	...	...	...	...	...	...
2. Cost of Furniture, Utensils and Fittings ...	51 11 9	21 16 5	4 4 6	6 6 3	...	...	...	...	0 2 2	0 14 3	...	0 18 7	...	...	...	...
3. Cost of Bedding and Clothing ...	80 7 9	94 1 1	28 0 6	6 2 8	9 0 0	...	...	...	0 2 2	9 1 6	...	...	...	...	...	...
4. Cost of Provisions, Medical Comforts, Fuel, Light, Soap, Line and other Supplies or Services ...	847 0 4	712 10 7	491 14 8	237 7 1	...	...	...	...	208 11	1 233 0	3 303 10	3 125 8 6	...	...	...	...
5. Salaries and Allowances:— Medical Inspector ...	606 0 0	606 0 0	539 11 4	91 0 0	75 0 0	75 0 0	75 0 0	0 37 10 0	235 19	5 200 0	0 200 0	0 100 0 0	37 0	0 50 0	0 50 0	0 25 0 0
Lay Assistant ...	220 0 0	220 0 0	220 0 0	110 0 0	72 0 0	68 0 0	88 0 0	0 48 0 0	74 4 0	84 0 0	0 84 0 0	0 32 18 1	...	...	...	...
Matron, Nurses, Attendants, Guards, &c. ...	400 13 2	400 13 2	390 16 8	193 13 9	12 0 0	12 0 0	12 0 0	0 6 0 0	59 18 0	79 14 0	0 99 0 0	0 39 8 0	12 0	0 12 0	0 12 0	0 6 0 0
6. Miscellaneous or Special Expenses, Instruments and Appliances, Railway Fares, &c. ...	8 3 0½	32 6 2	17 18 9	13 15 9	6 6 9	4 4 8	6 7 6	3 5 0	0 0 9	36 7 3	1 0 9	0 3 1	380 8	11 52 16	5 12 4	11 2 13 3
	2,451 16 2½	2,228 14 10	1,847 4	3,778 7 9	174 6 9	139 4	8181 7	694 15 0	579 13	1 644 1	9 687 11	0 298 16 3	79 8	11 114 16	5 74 4	11 33 13 3

*Continued.*

SERVICE.	KING WILLIAM'S TOWN.				PORT ELIZABETH.				UITENHAGE.				ALL DISTRICTS.											
	1901.		1902.		1903.		Half Year 30th June, 1904.		1901.		1902.		1903.		Half Year 30th June, 1904.		1901.		1902.		1903.		Half Year 30th June, 1904.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1. Cost of Buildings, Construction and Repairs ...	...	77 14 2	...	...	0 7 6	1 17 6	6 13 0	...	...	...	...	...	...	...	...	...	...	239 3 2	222 3 7	161 10 10	120 2 3			
2. Cost of Furniture, Utensils and Fittings ...	...	...	...	...	24 4 9	16 19 6	20 6 0	...	...	...	...	...	...	...	...	...	...	75 18 8	39 10 2	24 10 6	7 4 10			
3. Cost of Bedding and Clothing ...	...	56 9 9	...	...	41 13 6	62 14 1½	47 9 1½	...	...	...	...	...	...	...	...	...	...	131 3 5	222 6 5½	75 9 7½	6 2 8			
4. Cost of Provisions, Medical Comforts, Fuel, Light, Soap, Lime and other Supplies or Services ...	171 13 0	140 1 3	110 10 0	54 9 0	389 17 11½	358 17 1	340 12 4½	156 1 4	...	...	...	...	...	...	...	...	...	1,617 2 4½	1,444 9 2	1,246 7 3½	573 5 11			
5. Salaries and Allowances:— Medical Inspector ... Lay Assistant ... Matron, Nurses, Attendants, Guards, &c. ...	100 0 0 74 10 5 40 2 1	0 100 0 75 0 0 29 0 0	0 100 0 0 0 0 109 8 0	50 0 0 ... 56 6 8	218 5 0 112 0 0 80 9 7	218 5 0 112 0 0 84 13 7	218 5 0 112 0 0 84 13 7	109 2 6 56 0 0 40 2 10	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	75 0 0 ... 24 3 4	37 10 0 ... 12 1 4	1,347 4 5 552 14 5 629 6 2	1,324 5 0 559 0 0 642 4 1	1,257 16 1 504 0 0 732 1 7	450 2 6 246 18 1 353 12 7			
6. Miscellaneous or Special Expenses, Instruments and Appliances, Railway Fares, &c. ...	12 0 9	3 11 9	1 15 0	8 6 9	38 14 10	34 18 0	32 2 0	...	3 17 9	2 17 3	2 17 3	2 9 9	2 9 9	2 9 9	2 9 9	2 9 9	1 4 6	167 1 6	73 18 8	29 8 4				
	398 6 3	481 16 11	321 13 0	169 2 5	905 13 1½	890 4 9½	862 1 1	361 6 8	103 1 1	1102 0 7	1102 0 7	101 13 1	101 13 1	101 13 1	101 13 1	101 13 1	50 15 10	4,692 5 5	4,620 19 11½	4,075 14 10	1,786 17 2			

ANNEXURE "D."

Statistical Returns under "The Contagious Diseases Prevention Act, 1885.

TABLE 5.

TABLE showing for the several Districts of the Colony Proper the Number of persons treated under the provisions of Part II. of "The Contagious Diseases Prevention Act, 1885," during the half-year ended 30th June, 1904, together with the condition of treatment and the result.

DISTRICT.	IN HOSPITAL.												OUTDOOR.															
	Total number of patients treated during half-year ended 30th June, 1904.		No. of patients remaining under treatment on the 31st Dec. 1903.		No. of fresh cases coming under treatment during half-year ended 30th June 1904.		Number of discharges during half-year Jan.-June, 1904.				No. of patients remaining under treatment on 30th June, 1904.		Average daily number of patients under treatment.		Average duration of treatment per patient (in days).		Number of discharges during half-year Jan.-June, 1904.				No. of patients remaining under treatment on 30th June, 1904.		Average daily number of patients under treatment.		Average duration of treatment per patient (in days).			
							Cured.		Died.								Lapsed.		Cured.								Died.	
	Per-sons.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
Aberdeen	4	1	3	2	3	7	1	1	1	2	26	58	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1
Albany	11	8	3	2	6	2	1	1	1	1	53	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Albert	1	1	1	2	2	1	1	1	1	1	21	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Alexandria	4	2	2	2	7	1	1	1	1	1	133	631	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Aliwal North	24	17	7	4	1	3	3	4	1	2	85	177	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Barkly West	8	4	4	4	1	4	5	3	1	2	120	1118	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	
Beaufort West	30	14	16	16	5	4	2	2	1	1	107	188	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Britstown	12	7	5	6	1	3	4	17	1	1	84	257	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
De Aar	8	4	4	6	3	1	1	1	1	1	41	634	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Caledon	11	5	6	6	3	3	20	3	1	3	113	335	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	
Calvinia	28	14	9	9	5	5	3	3	1	1	136	862	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Cape	14	9	10	10	2	2	5	2	1	1	148	765	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Carnarvon	19	11	12	7	8	2	2	2	2	1	62	140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Clanwilliam	23	11	12	3	3	1	2	1	1	1	46	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Colesberg	11	8	4	2	2	1	1	2	1	1	1	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Craddock	11	8	4	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Fraserburg	6	4	2	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
George	14	7	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Glen Grey	1	6	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Gordonia	16	2	2	6	1	1	5	1	1	1	182	236	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
New Bethesda (G.R.)	8	2	4	6	3	1	1	1	1	1	82	107	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Hanover	10	4	4	6	1	1	1	1	1	1	128	107	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Hay	1	1	1	9	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Herbert	23	14	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Hope Town	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Strydenburg	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Humansdorp	21	10	11	9	1	2	1	2	1	1	55	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Jansenville	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Kenhardt	138	108	30	34	74	14	26	64	13	5	48	3097	169	1	23	3	6	1	2	6	1	1	1	1	1	1	1	
*Kimberley	28	16	12	2	11	1	11	1	1	1	25	551	169	1	3	1	1	1	1	1	1	1	1	1	1	1	1	
King William's Town	9	3	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Keiskama Hoek	22	10	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Middle Drift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	















Malmesbury	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</
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## EXPENDITURE:—NATIVE TERRITORIES.

Butterworth—District Surgeon's Fee for Medical Attendance and Medicine	£	s.	d.
Bizana	...	...	4 17 6
"	...	...	36 3 10
Total	...	...	41 1 4

“Nil” F. Returns (Expenditure in connection with Part II. of the C. D. Act) have been received from the following districts of the Colony Proper:—

Venterstad (Albert).	Bredasdorp.	Fort Beaufort.	Molteno.	Laingsburg (Prince Albert).	Stockenström.
Lady Grey (Aliwal North).	Durbanville (Cape).	Adelaide.	Montagu.	Queenstown.	Tulbagh.
Barkly East.	Cathcart.	Williston (Fraserburg).	Peddie.	Sterkstroom.	Victoria East.
Klipdam (Barkly West).	Ceres.	Herschel.	Piquetberg.	Simon's Town.	Wodehouse.
Bathurst.	Maraisburg (Cradock).	Kakamas (Kenhardt).	Port Elizabeth.	Somerset West (Stellenbosch).	Indwe.
Bedford.		Kongha.	New Brighton.	Steynsburg.	

# REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

## ANNEXURE "E."

### REPORT OF THE BACTERIOLOGICAL ASSISTANT.

To the Medical Officer of Health for the Colony.

I have the honour to submit to you the following details of work done in the Public Health Laboratory attached to your Office during the six months ended 30th June, 1904.

The chief part of the work has been made up of routine examinations for the diagnosis of Plague in man and animals, Tuberculosis, Typhoid Fever, Diphtheria, etc., as shown in the following tabular statement.

Specimens examined during six months ended 30th June, 1904.				Number.
Rats from Cape Town Docks and Harbour Board Area ...				7,194
Rats from other sources ... ..				205
Rats found Plague-infected ... ..				17
Mice ... ..				45
Mice found Plague-infected ... ..				21
Cats ... ..				4
Cats found Plague-infected ... ..				0
Other Animals ... ..				1
Other Animals found Plague-infected ... ..				0
Sputum for Tubercle ... ..				54
Swabs or membrane for Diphtheria ... ..				15
Blood from cases of suspected Typhoid ... ..				9
Blood for Malaria parasites ... ..				3
Water samples (Bacteriological Examination) ... ..				29
Sewage Samples " " ... ..				5
Urine ... ..				20
Tissues, Tumours, etc. ... ..				37
Leprosy ... ..				67
Actinomycosis ... ..				1
Material from suspected Plague cases ... ..				27
Medico Legal cases ... ..				16
Rabbits inoculated for Anti-Rabic Virus ... ..				36
Disinfectants examined ... ..				3
Post Mortems attended ... ..				102

All rats caught or found dead at the Docks or on Shipping in the Table Bay Harbour Board Area are brought by the Rat Catcher to the Laboratory early in the morning of the day following that on which they are caught. They are submitted to a careful Post Mortem examination, special note being made of the glands in the Submaxillary, Axillary, Inguinal and Lumbar regions; the spleen and lungs are also exposed, and if any lesions suspicious to the naked eye of Plague are noticed, then smears, cultures and inoculation into other animals are at once made. Although during the six months under consideration there were numerous occasions upon which I considered it advisable to resort to inoculation experiments to prove the absence of Plague-infection in suspicious cases, still none of the 7,194 rats examined were found to be Plague-infected. It may seem that the time and labour expended on the examination of all rats from the Harbour Board Area are wasted, still I am convinced that sooner or later Plague will again be imported into Cape Town Docks by means of infected rats in crates or cases of merchandise, or in ships coming from a Plague-infected Area. The present method is the only one by which we can obtain early information regarding any epidemic amongst rodents; moreover the work of the Rat Catcher accounts for over 1,000 rats a month, which, although making very little effect on the large rat population, helps to keep up a fair death rate.



The animals and cases mentioned in the above table as having been diagnosed as suffering from Plague, all came from the known centres of infection, viz., Port Elizabeth, East London, Knysna and Queenstown.

During the six months one hundred and two Post Mortem examinations were held upon cases of sudden death, or of death without medical attention. Careful watch has been kept at all these autopsies for any symptoms of Bubonic or Pneumonic Plague, but with negative results. In connection with the Morgue I would again like to call attention to the remarks in my report for the year 1903, regarding the inconvenience that frequently arises from the absence of suitable waiting-room and office accommodation; not only is this want felt as acutely as ever, but now that large and important buildings are growing up everywhere round Venken Lane, thus shutting out both light and air from the Morgue, the question of a more suitable site for such a building must soon be considered. I do not think that the unsuitableness of the present site for a Morgue is fully realized. The building is in a narrow lane surrounded on three sides by dwelling-houses, and now overshadowed in front by large printing works. The windows on the Venken Lane side open directly on to the public street, and when any very putrid body is deposited in the Mortuary for examination, many and just complaints are made by the neighbours and passers-by regarding the smell.

GEO. W. ROBERTSON,

Bacteriological Assistant in the Office of the Medical  
Officer of Health for the Colony.

Public Health Laboratory,  
Cape Town, 15th July, 1904.

# REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE COLONY.

## ANNEXURE "F."

### REPORTS ON THE N'DABENI AND NEW BRIGHTON NATIVE RESERVE LOCATIONS.

#### N'DABENI NATIVE RESERVE LOCATION.

Report by Dr. J. H. ELMES, Resident Medical Officer, for the half-year ended 30th June, 1904.

1. Site, Area, Soil, Population.—The Location is situated on a portion of what is known as the "Sand Reserve," adjoining the Uitvlugt demarcated forest, and between the forest and Maitland village.

The present area is 84 acres, and should it at any time become necessary to enlarge the location, I understand that arrangements have been made for an extension in the direction of the forest, and between the old road to the Plague Hospital and the Central Brickworks railway line, to include a further area of 15 acres.

Soil.—The surface consists of loose sand, underneath which there is a stratum of ironstone gravel, varying from one foot and a half to three feet in thickness, and surmounting a huge clay deposit.

Race and Population.—The large majority of the residents are of the Mxosa tribe, their numbers and the numbers of other races resident being approximately as follows:—50 per cent. Mxosa, 30 per cent. Fingo, 10 per cent. Basuto, 5 per cent. Bechuana, 5 per cent. Zulu, making a total average population of 4,739, *i.e.*, Adults, males, 3,900, females 600; Minors, males 100, females 139.

Climatic Conditions.—The location is in a very exposed situation, and suffers much from the prevailing south-east wind.

2. Sanitation.—Dwellings and Accommodation.—There are five different types of dwellings in the location, known as types A, B, C, and D, and dormitories. Type A is what is known as the "old lean-to hut" which was constructed rapidly during the prevalence of Plague, and simply consisted of a gabled roof placed on the ground; there were no side walls. These huts number 510. They have all been converted, by the insertion of side walls, into suitable dwellings. Type B is a larger and well-ventilated hut, constructed of wood and iron. Type C is what is known as the "Specimen Cottage," and contains 4 rooms, a kitchen, and the usual conveniences; only one of this type of hut has been constructed, and it has proved a white elephant, as no natives would pay the rent necessary for such a commodious dwelling. It is now occupied by the foreman carpenter. Type D is a very excellent style of building consisting of blocks of six houses, each house brick-lined. Some of these are divided into two rooms, and are occupied by married natives; others consist of one room, and are occupied by single men. They are all provided with fireplaces. There is no overcrowding at present, and the location generally is clean.

Water-supply.—Source.—There are two sources of supply, one being derived from the Cape Town reservoirs, and the other from local boreholes. Both supplies are good and abundant.

Stormwater Drainage.—The question of disposal of stormwater is difficult to solve, owing to the following reasons: (1) The levelness of the surface; (2) the non-absorbant nature of the ironstone gravel; (3) the fact that we are only 50 feet above sea level; (4) the existing drains (three in number, discharging into the vlei at the east of the location) becoming constantly choked with drift sand.

Sanitary Staff.—Organisation.—The offices of Sanitary Inspector and Clerk of Works have been combined, and the official occupying this position exercises a general supervision over the sanitation of the location; in this respect he is responsible to the Medical Officer in charge, who is in turn responsible to the Medical Officer of Health for the Colony. The staff consists of one Sanitary Inspector and Assistant Inspector and 28 labourers and others, and the equipment of 11 draught animals, 27 trucks, 300 night-soil pails, 6 wheeled slop-water tanks, and other sundry articles.



Sanitary Conveniences and Accommodation.—These are suitable and adequate with the exception of the latrines known as the “Simpson Latrine,” of which there are five, which are not sanitary. Steps are already being taken to have these latrines altered to a more suitable pattern.

Sanitary Removals.—Stercus is removed in pails to the depositing site to the east of the location, and there buried in pits. Slop-water is conveyed in travelling tanks and tipped at a site adjoining the stercus depositing site, whence it runs into the previously mentioned vlei.

Washing and Washhouses.—Two washhouses (one for either sex) have been provided at the east of the location; they both contain a double row of troughs and two shower baths.

Baths and Ablution Rooms.—Five of these have been provided at approximately the centre of the location, and have been found sanitary and adequate.

General Sanitation and Cleanliness.—The arrangements for the maintenance of general sanitation and cleanliness have been found to be uniformly satisfactory.

3. Health of Residents.—1,776 cases of various illnesses were treated during the period under report, which works out at 16·01 per cent. of the total floating population. Approximately 10 per cent. of these were adult males, 2 per cent. adult females, and 4·01 per cent. children.

Infectious Diseases.—No cases of Small-pox or diseases resembling Small-pox, Scarlet Fever, Diphtheria, Plague, or Erysipelas occurred during the period under report.

Means of Isolation.—An isolation ward has been authorised, and is now in course of construction. Previously to the six months under report cases of infectious disease were isolated in a tent.

Table showing number of cases treated.

Disease.	No. of Cases.	How dealt with. Whether		Result.	
		Treated in own home.	Admitted to Hospital.	Died.	Recovered or Improved.
Enteric Fever ... ..	10	2	8	3	7
Tuberculosis ... ..	28	16	12	13	15
Syphilis ... ..	2	2	...	...	2
Other communicable diseases, including parasitic skin diseases ... ..	1	...	1	1	...
Diarrhoeal diseases & dysentery	50	48	2	12	38
Scurvy and diseases resembling scurvy ... ..	35	35	...	...	35
Other diseases (various and non-infectious) ...	1,650	1,610	40	24	1,626

Matters beyond Location affecting Health of Residents.—There are two encampments of storekeepers outside the main gates of the location; these places are in a very insanitary condition; they have recently been included in the Municipality of Maitland, and an effort is now being made to keep them clean.

Disinfection.—On Friday of each week, clothing, bedding, etc., for disinfection is sent to the steam disinfector at the Eviction Camp.

Deaths and Death Rate.—Fifty-three deaths have been recorded, being a death rate of 22·10 per 1,000 per annum.

Infantile mortality has been high, owing to the prevalence of Diarrhoea Infantum.

Births and Birth Rate.—Forty-one births have been registered, being a birth rate of 17·10 per 1,000 per annum.

Vaccinations.—513 Adults have been vaccinated or re-vaccinated, and 23 children. The attendance of children for the purpose of being vaccinated has been bad, but arrangements are now being made for the more efficient carrying out of this work.



Inoculations with Haffkinine.—This has been suspended until further instructions.

4. Location Hospital.—Site, etc.—The hospital enclosure abuts on the main road, about 50 yards inside the main gate of the location, and contains the following buildings:—Hospital, Medical Officer's quarters, nurses' quarters, servants' quarters, hospital kitchen, mortuary. All these buildings have been found suitable and adequate.

The hospital contains three wards, one having ten beds, and two five beds each. The arrangements for ventilating and lighting are good. No heating apparatus has been provided, excepting a hot water arrangement attached to the kitchen stove; this supplies hot water for the baths, etc.

Sanitary Arrangements.—Stercus is removed in pails to depositing site. Slops are removed by travelling tank. Refuse is removed by Scotch cart.

Administration and Organisation.—Matters concerning the administration and organisation of the hospital are communicated by the Medical Officer to the Assistant Resident Magistrate, and by him to the M.O.H. for the Colony.

Staff.—The Staff is composed as follows:—One head nurse, 1 nurse, 1 cook, 1 wardmaid, 1 wardboy, 1 wardboy (who acts as clerk and interpreter), and 1 sanitary man (who acts as *post-mortem* attendant, also does the collection, disinfection, and redistribution of clothing, bedding, etc., and conveys bodies to the morgue; also conveys patients to the hospital who are unable to walk).

Supplies are requisitioned on a prescribed form daily from contractors. The requisitions are signed by the Medical Officer and the Assistant Resident Magistrate, and are according to diet scales for nurses, staff, and patients, which have been prescribed by the Medical Officer of Health for Colony. Stimulants and other extras are prescribed by the Medical Officer in his own handwriting and a record kept.

Furniture and Equipment.—A Register of this is kept.

In-Patients.—There were four patients remaining in hospital on January 1st, 1904, and 59 admitted during the six months. Total treated in wards, 63. They were suffering from the following diseases:—Phthisis 10, Pneumonia 5, Enteric 8, Abscess 5, Bronchitis 3, Burns and Scalds 3, Pleurisy 2, Enteritis 2, Fractures 4, Wounds 3, General Tuberculosis 1, Meningitis 1, Tonsillitis 2, Cardiac Disease 2, Hemiplegia 2, Rupture of Urethra 1, Hepatic Cyst 1, Dysentery 2, Febricula 1, Sprains 2, Epilepsy 1, Rheumatism 1, for Observation 1. Average stay of patients, 18.4 days; recoveries, 40; deaths, 23. Four patients other than registered residents were admitted as urgent cases. There were no cases of special importance.

Out-Patients attend the hospital daily at 9 a.m.; those who are unable to attend are visited at their homes; 1,607 is the number of attendances on out-patients at the hospital, and the number of visits to patients in their homes has been 476.

Midwifery Cases.—Forty-one births were registered, but only a small proportion of these (8) were attended by the Medical Officer, as the natives do not call him in, as a rule, unless some complication arises, when they are quick to do so. They usually do their own nursing. No cases of Puerperal Fever occurred during six months; in one case which occurred previously the patient was removed to hospital, and the usual precautions taken. The patient recovered, and no further cases occurred.

Mortuary and Post-mortem Examinations.—A Post-mortem is performed on each patient dying in hospital, and the results recorded in a prescribed book.

General Remarks and Recommendations.—I consider that the present hospital enclosure is too small, the isolation ward now being erected being only 17 yards from the hospital building. I also consider that the hospital enclosure should never have been surrounded by dwellings to such an extent and in such numbers and proximity as is at present the case. When the main road was proposed to pass immediately in front of the hospital, the Medical Officer was consulted as to whether the noise of the traffic would be detrimental to the patients; he was never consulted when it was arranged to crowd the place round with huts and a shop (the huts are about 40 feet from the fence), and the noise from the huts and shop are not only detrimental to the patients, but unbearable to the European nursing staff and Medical Officer. I would also like to call attention to the new arrangements *re* the holding of inquests in cases of death occurring in the location. Every facility exists here at present, there being a mortuary, Assistant Resident Magistrate, and Medical Officer.

Under existing circumstances, when an inquest has to be held, the body has to be conveyed from this morgue to the morgue at Woodstock, thus causing (in



pauper cases) additional expense to Government, and in other cases unnecessary expense to the relatives of the deceased, apart from their natural objections to such a course being followed. This arrangement is both cumbrous, expensive, inconvenient, and totally unnecessary, in my opinion, and it is difficult to understand what useful purpose it serves.

## NEW BRIGHTON NATIVE RESERVE LOCATION.

Report by Dr. A. B. SIGISMOND POWELL, Resident Medical Officer, for the half-year ended 30th June, 1904.

1. Location Site.—The site of the Port Elizabeth Native Reserve Location is, in every way, an admirable one. It lies on a slope facing the sea, the highest point being approximately 50 feet above sea level. In distance it is about five miles from Port Elizabeth Town Hall, but there is a frequent service of trains from New Brighton railway station, close to the location, and special trains and terms are offered to natives.

Soil.—Vegetable, overgrown with bushy veld and overlaying shaley gravel.

Area.—There are 27 acres enclosed by the fence, but the area proposed to be built on is 252 acres.

Population varies considerably. The average monthly population from 1st January to 30th June, 1904, has been 2,616 inclusive.

Race.—Kafirs for the most part, with a sprinkling of Basuto, Fingoes and Bastard Hottentots. Only aboriginal natives are allowed to become "registered residents." The relative proportion of males to females is about seven men to five women. The relative proportion of adults and minors is about one child to two adults.

Climatic Conditions.—Favourable on the whole; they resemble Port Elizabeth, only New Brighton is not quite so exposed to the "south-easter."

2. Sanitation.—Dwellings and Accommodation.—There are three kinds of native dwellings in the location. Of these, two are for married people and one for single. (1) Class "B" hut for married natives, built of wood and iron, pitch roofs, consisting of two rooms 12 feet by 12 feet, with etoop in front. Small kitchen, 10 feet by 8 feet at back. Built in pairs, detached. These are the most popular form of hut, and are in demand; they appear in every way suitable. The only complaint ever being heard is the rent question. (2) Accommodation similar to above, also for married folk built in blocks containing nine double rooms 10 feet by 12 feet, with kitchen to each double room. (3) Single men's quarters, consisting of huts built in rows of nine rooms each, back to back, with use of general kitchen. All built of wood and iron with wood floor except kitchen floor which is earthen. There is, I understand, room for about 6,000 people, and there has been no overcrowding so far. The cleanliness of the location has, on the whole, been good.

Water-supply.—Source, Van Staaden's Reservoir, conveyed to the location in temporary 3 inch iron pipes. The quality is fairly good. The water is, to a certain extent, discoloured with rust during its passage through the pipes. Quantity: about 1,000 gallons are consumed daily.

Stormwater Drainage.—Beyond the natural fall of the ground (about 1 in 60) there is no provision made for stormwater.

Sanitary Staff.—There is no sanitary staff at New Brighton, the entire sanitary work being carried out by a contract entered into by the Public Works Department.

Sanitary Conveniences and Accommodation.—The sanitary conveniences, consisting of wood and iron latrines, separate for the sexes, are all of a more or less temporary nature, and their construction is of the roughest possible kind. This fact renders the keeping of them in a satisfactory state of cleanliness and repair a very difficult matter. The latrines for men have a lean-to roof and a concrete floor, and are fitted with an iron trough for urine, which is led by a pipe into a tank sunk into the ground, from which it is pumped out and removed by the sanitary contractor daily. Galvanised iron stereus tubs are used, and these are in duplicate in order that one may be thoroughly disinfected while the other is in use. Jeyes' fluid is usually used.

The female latrines are also lean-to, with an iron screen, and are divided into compartments, with a door. Great difficulty is experienced in inducing the natives to observe cleanliness in the use of these conveniences.



With regard to their suitability, they appear to meet the immediate needs of the location, and the number is sufficient for some time to come.

Sanitary Removals.—Carried out at present by contract.

- (a) Sanitary pails at a shilling a tub.
- (b) Rubbish at two shillings a Scotch cart load.
- (c) Slops at 7s. 6d. for three buckets a month.

Stercus system consists of a daily service to registered residents, and a bi-weekly (oftener if necessary) to White population. The buckets are interchangeable and disinfected with Jeyes' fluid; they are carried in covered vans to the stercus pits, which are situated over a mile from the nearest dwelling. The soil is sandy. Each pit is 12 feet long and 7 feet deep, and the stercus is covered by 6 inches of sand daily. Urine is carried in portable tanks and allowed to flow on sandy soil at the depositing ground.

Slop-water from the ablution sheds is carried in special portable wheeled tanks and allowed to flow on a special part of the depositing site.

Rubbish all over the location is placed by the residents, aided by the scavengers, in zinc water-tight bins which are covered and fixed in an iron frame, and whose numbers correspond with the requirements of the residents. The rubbish from these bins is daily emptied by Scotch cart, taken to the depositing site and buried or burned. This system is working well at present, but might be modified on certain points, such as the planting of trees at the stercus pits and having the pits themselves smaller and shallower, thus diffusing the material over a larger area.

Washing and Wash-houses.—There are no wash-houses in New Brighton. The washing of clothes is carried out by the residents either in the streets, at the stand-pipes, or in the ablution rooms to which they transport their washing tubs. Both these methods appear to me to be bad.

Baths and Ablution Rooms.—Three ablution rooms exist here. One is used by males, another by females, and the third by the women for washing clothes. These ablution rooms are very popular and are much used. Each ablution room is built of wood and iron, is 54 feet by 12 feet, has a pitch roof, a concrete floor, and water laid on. There are three taps on each side. The waste water runs down a central channel and is collected in tanks sunk in the ground outside the building from whence it is pumped daily by the sanitary contractor.

General Sanitation and Cleanliness.—The Port Elizabeth Native Location is in a perfectly sanitary condition; this is due to its position, the abundance of fresh air, the absence of overcrowding, and the clean state of the veld. With regard to cleanliness, much must be done in the way of scavenging and clearing of bush before the location can be declared clean and tidy. The residents, as a whole, are showing an excellent spirit in carrying out the sanitary regulations.

3. Health of Residents.—The male native in this location is healthy, and apart from accidents, rarely reports himself sick. The same applies to the women, except that many of them have pelvic complaints, due to neglected Puerperia, and that they, in common with the men, readily acquire Phthisis. By far the greater number of patients are children below the age of five years. I think that this fact is, in a great measure, due to the way in which these children are brought up. The Kafir baby, though born healthy, is almost invariably carried by the mother on her back slung in a blanket, even on the hottest day. The result of this is that they readily "catch cold" and that their lungs are unable to withstand the disease. I regret greatly being unable to offer any statistics on these points and can only refer to the table of deaths, viz.:—Male adults, 5; female adults, 2; children, 19; total, 26 deaths.

Infectious Diseases.—No cases of Small-pox or diseases resembling Small-pox, Scurvy, Leprosy, Erysipelas, or Diphtheria occurred; Plague, one case occurred.

The case of Plague occurred in May last, and was a native adult male "Swaartbooi Tola"; the source of infection in his case was traced to infected rats at his place of work in Port Elizabeth. The Plague Administration were communicated with and he was promptly removed to the lazaretto the same day. He subsequently made a good recovery. Disinfection of the dwelling and surrounding huts was carried out by the plague staff, and two contacts were removed with the patient. The occupants of adjoining houses were required to report themselves to me daily for a period of ten days, but did not show any signs of the disease.

A wardsman, "George," was removed for observation to the lazaretto in June under suspicion of Plague; the illness, however, proved not to be due to that disease. The patient subsequently returned in good health.



**Tuberculosis.**—This disease, I am sorry to say, is very prevalent in the location, especially among natives from up-country, who appear to offer little resistance. I think that the disease is intensified by the native habit of covering the head with a blanket when sleeping, and also that they very soon “give in” when attacked.

Endeavours are now being made to educate them to regard it as a communicable complaint and to get them to observe due precautions.

**Venereal Disease.**—I do not consider that much of these forms of disease exist in New Brighton. Practically the only form which has been brought to my notice has been Congenital Syphilis in children. Adults certainly seldom come to me for treatment, the reason being perhaps, that they prefer “Kafir Medicine,” though should that occur to any great extent, one would think that the resulting complications would be sure to attract attention.

**Tinea Tonsurans** and **Microsporon Furfur** are fairly common among the children.

**Diarrhœa and Dysentery.**—There is always a certain amount of infantile and summer diarrhœa present, but in addition there is also a mild form of Dysentery, characterised by a slight rise of temperature, and the frequent and painful passage of blood-stained mucus. No definite cause is discoverable for it, and it occurs in adults and children, White or Black. As a rule it is not dangerous, except to infants and the aged.

There are no diseases peculiar to New Brighton.

The sanitary conditions of the immediate surroundings of New Brighton are very good, but the presence of the two unauthorised locations “Korsten” and “Dassies’ Kraal” are always a menace to the health of this place. In them, I understand, no sanitary arrangements exist, and Kafir beer drinking is rampant. Dassies’ Kraal also is a hot-bed of immorality, and Syphilis is very rife there. With respect to occupation, most of the boys here work in Port Elizabeth or for the Harbour Board, and I do not know of any diseases brought about by virtue of their work.

**Disinfection.**—Carried out by the Local Authority.

**Deaths and Death Rate.**—There have been 26 deaths. The total death rate during the half-year ended 30th June, 1904, has been 19·8 per 1,000 per annum, and that for children under 5, 14·6 per 1,000 per annum.

**Births and Birth Rate.**—There have been 40 births. The birth rate is 30·28 per 1,000 per annum.

**Vaccinations.**—Forty-four persons were vaccinated during the half-year.

**Inoculations.**—Six persons have been inoculated.

**4. Location Hospital.**—**Site.**—There is no hospital in the New Brighton Native Reserve Location. In March last, one of the Class “C” dwellings was adopted for temporary purposes. The dwelling selected was Hut A, Block 46, situated in Avenue C. and consisting of nine rooms. The partitions of two rooms were removed to make a male and female ward respectively, while the other rooms were converted into an out-patient room and office, as well as a store and sleeping accommodation for two attendants. The ceilings were at the same time lined with matchboarding and communicating doors arranged in the partitions; an external kitchen and male and female latrines were added, and these, with a large shed, to be converted into a mortuary, completes the hospital buildings.

The furniture and equipment is of the simplest possible nature, and was for the most part purchased locally, but authority has been granted to draw upon the plague equipment stores should emergency arise. A small supply of dressings and instruments have been supplied from Cape Town.

As to the adequacy or otherwise of the hospital buildings, it is, of course, impossible to take in serious or “operation” cases on account of the small nursing facilities, and so far all such cases have been sent to Port Elizabeth for treatment. This arrangement appears to work satisfactorily enough, and I think meets the needs of the present small population, though, of course, it is quite inadequate for a full location.

**Wards.**—Two in number, male and female, each containing two beds; they are 24 feet by 12 feet, and possess four windows apiece, giving cross ventilation if necessary.

**Ventilation.**—Perforated zinc in roof in addition to windows.

**Lighting and Heating.**—Oil lamps and paraffin stoves.

**Sanitary Arrangements.**—Daily removal of sterco buckets (which are interchangeable) by contract. Slop-water and refuse collected in covered zinc bins and removed daily by contractors.



Administration and Organisation.—The temporary hospital is administered by the Resident Medical Officer who is responsible for the stores, etc., contained therein. A list of articles is made out by him and a monthly stocktaking and condemning takes place. The male and female attendants respectively are made responsible to the Medical Officer for the stores and equipment under their care.

All goods are procured by requisitioning through the Assistant Resident Magistrate.

At ten a.m. daily, all those natives desirous of becoming resident in the location are required to present themselves at the temporary hospital for medical examination, and if in good health, are granted a certificate to that effect, together with one of recent successful vaccination, should that be the case. At the same time, those natives leaving the location are granted passes, under the Plague Regulations. Primary and secondary vaccination and inoculation is undertaken at the same hour. 11 a.m. is the hour fixed for out-patients. The Wardsmen are required to submit a daily report to the Inspector of Natives, of all cases of sickness occurring in their wards, and these reports are collected by him and embodied in his daily Sick Report, which gives the name registered, location number, and address of all the sick persons, and reaches the hospital at 10 a.m.

Urgent cases occurring through the day are reported in special reports.

All those persons who are unable to come to the out-patient room are seen by the Doctor during his daily round of the location.

4. Staff.—Consists of one messenger, one wardboy, one nurse and cook.

Allocation of duties.—The messenger is utilised as clerk, interpreter, and medical assistant. The wardboy nurses male patients and has charge of all stores and equipment in the male ward. Nurse and cook nurses female patients and children, and is responsible for the proper preparation of the food for patients and staff.

System of Supplies.—All food is obtained by contract from stores in the location. A daily requisition on a prescribed form is made out by the Resident Medical Officer and countersigned by the Assistant Resident Magistrate, who deals with the vouchers when they come in. The diets of patients and staff are those laid down by the Medical Officer of Health for the Colony.

Very little stimulants have been required so far, and they have been supplied by the chemist on my prescription. No stock has been kept in the temporary hospital. Extras have been made the subject of a special requisition.

Furniture and Equipment.—The furniture was provided by the Public Works Department. It is inspected every month and worn-out articles are condemned on a prescribed form and replaced by requisitioning through the Assistant Resident Magistrate. A very small supply of surgical dressings, etc., has been received, and also a few minor instruments. There is no drug supply, but all patients receive medicine from the chemist in the location on my prescription. The account for drugs is submitted to the Magistrate every month and is subject to 33½ per cent. discount.

In-patients number 8, admitted since opening in March.

Diseases.—Dysentery, 2; Traumatism, 2; Epilepsy, 1; Dysmenorrhœa, 1; Confinement, 1; Newborn Child, 1. Average stay, 10 days; recoveries, 3 males and 3 females; deaths, 2 males. There were no other than registered residents treated in the hospital and no cases of special interest presented themselves.

Out-patients.—Seen daily at the temporary hospital at 11 a.m., 761 presented themselves for treatment during the half-year.

Midwifery cases.—With regard to midwifery cases, my experience has been that the native does not send for a doctor unless complications ensue. In this location, engaging a doctor beforehand appears to be unknown. It has not, so far, been my practice to charge the fee (or any fee) laid down in the Regulations and I have made no distinctive record of confinement cases, but my General Book shows five cases. There exist in the location more than one coloured female who act as midwives, and I am told that these persons' services are in great request, and that they usually receive a sum of 2s. 6d. for attending. They, as far as I can judge, possess experience, but no skill, but appear willing to call in and assist the medical man when things go wrong. From what I can learn, the Kafir custom is strongly against any man being present during confinement. Beyond the women mentioned above, no system of nursing exists. During the half-year 299 cases (apart from maternity ones) have been seen by me in their own homes. These have been persons who from ill-health or other causes have been unable to come to the out-patient room, and whose names have figured in the "sick report" or the "special report."



Mortuary and *Post-mortem* Examinations.—No mortuary exists at present. The only *post mortems* that have been held have been Medico-legal ones.

General Remarks and Recommendations.—It is almost impossible to judge of the requirements of the location until the increase of population justifies more permanent medical and sanitary work being undertaken.

Statistical Tables in connection with the Reports of the Resident Medical Officers at N'dabeni and New Brighton Native Reserve Locations, for the half-year ended 30th June, 1904.

TABLE I.

Return of Populations, Births and Deaths at the N'dabeni and New Brighton Native Reserve Locations, during the half-year ended 30th June, 1904.

	N'dabeni Native Location.					New Brighton Native Location.				
	Average Population.	No. of Births	Birth Rate per 1,000 per annum.	No. of Deaths.	Death Rate per 1,000 per annum.	Average Population.	No. of Births	Birth Rate per 1,000 per annum.	No. of Deaths.	Death Rate per 1,000 per annum.
Registered Residents ...	4,739	41	17·30	53	22·36	2,616	40	30·58	26	19·86
Others ...	56	...	...	...	...	26	...	...	...	...
	1,795	11	17·10	53	22·10	2,642	40	30·28	26	19·62

TABLE II.

Return of Causes of Death and Age at Death of Persons dying in the N'dabeni and New Brighton Native Reserve Locations, during the half-year ended 30th June, 1904.

N'DABENI NATIVE LOCATION.

Disease.	Under 5		5-10		10-15		15-20		20-30		30-40		40-50		50-60		60-70		Over 70		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Typhoid (Enteric) Fever ...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	3
Phthisis ...	...	...	...	...	...	1	...	...	3	1	2	1	2	1	...	...	...	...	...	...	11
Tabes Mesenterica ...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
General Tuberculosis ...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Diarrhoea and Dysenteric Diarrhoea.	10	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
Meningitis ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Convulsions ...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Bronchitis ...	...	2	5	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	8
Pneumonia ...	...	...	...	...	...	1	...	3	1	...	...	...	...	...	...	...	...	...	...	...	5
Empyema ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Asthenia ...	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
Cirrhosis of Liver ...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Long Continued Suppuration.	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Total ...	15	12	...	...	...	1	2	...	9	3	4	2	4	1	...	...	...	...	...	...	53

NWW BRIGHTON NATIVE LOCATIONS.

Typhoid (Enteric) Fever ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Phthisis ...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	3
Diarrhoea and Dysenteric Diarrhoea.	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	4
Congenital Syphilis ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Teething ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Epilepsy ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Bronchitis ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Acute Capillary Bronchitis.	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Broncho Pneumonia ...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Nasal Catarrh. Pneumonia.	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Asthenia ...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Exhaustion from Burn	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Total ...	13	6	...	...	...	...	1	...	2	...	2	1	...	...	...	...	...	1	...	...	26

NOTE.—All the above deaths occurred among Registered Residents of the Locations.

TABLE III.

Return of Cases of Infectious and Contagious Disease occurring in the N'dabeni and New Brighton Native Reserve Locations during the half-year ended 30th June, 1904 :—

DISEASE.	N'dabeni Native Location.			New Brighton Native Location.		
	Male.	Female.	Total.	Male.	Female.	Total.
Enteric Fever ... ..	8	2	10	1	...	1
Tubercular Diseases :—						
Phthisis Pulmonalis ... ..	24	2	26	8	3	11
Other Tubercular Diseases ... ..	2	...	2	...	...	...
Plague ... ..	...	...	...	*2	...	*2
Syphilis ... ..	2	...	2	...	...	...
Gonorrhœa ... ..	7	...	7	...	...	...
Soft Chancre ... ..	2	...	2	...	...	...
Total ... ..	45	4	49	11	3	14

\* One of these cases was removed to the Plague Lazaretto as a suspect, and on examination was found not to be suffering from Plague.

NOTE.—All the above cases occurred among registered residents of the Locations.

TABLE IV.

Return of In-Patients treated in the N'dabeni and New Brighton Native Reserve Locations during the half-year ended 30th June, 1904 :—

	N'dabeni Native Location.					New Brighton Native Location.		
	Registered Residents.		Others.		Total.	Registered Residents.		Total.
	Male.	Female.	Male.	Female.		Male.	Female.	
Number of Beds provided ... ..	15	5	...	...	20	2	2	4
Remaining in Hospital at beginning of year ... ..	4	...	...	...	4	...	...	...
Classification of Patients admitted :								
Surgical Cases ... ..	13	2	...	2	17	2	...	2
Ordinary Medical Cases ... ..	30	2	1	1	34	2	3	5
Cases of Enteric Fever ... ..	7	1	...	...	8	...	...	...
Cases of Other Infectious Disease ... ..	...	...	...	...	...	1	...	1
Venereal Cases ... ..	...	...	...	...	...	...	...	...
Average daily number of Patients in Hospital ... ..	4·7	·2	·6	·5	6	·02	·01	·03
Average stay of Patients :—								
Discharged—Days ... ..	27·14	16·	116·	...	} 18·4	7·	8·	8·
Died ... ..	14·45	...	...	22·33		10·5	...	10·5
Remaining ... ..	25·75	...	...	...		...	...	...
Operations :—								
With General Anæsthetic ... ..	...	...	...	...	...	...	...	...
Without General Anæsthetic .	2	...	...	1	3	...	...	...
Deaths :—								
Surgical Cases ... ..	2	...	...	2	4	...	...	...
Ordinary Medical Cases ... ..	16	...	...	1	17	2	...	2
Cases of Enteric Fever ... ..	2	...	...	...	2	...	...	...
Cases of Other Infectious Disease ... ..	...	...	...	...	...	...	...	...
Venereal Cases ... ..	...	...	...	...	...	...	...	...
Total ... ..	20	...	...	3	23	2	...	2
Average total Death-rate per cent.	40·00	...	...	100·0	38·98	40·00	...	25·00
Remaining in Hospital at end of half-year :—								
Surgical Cases ... ..	1	...	...	...	1	...	...	...
Ordinary Medical Cases ... ..	2	...	...	...	2	...	...	...
Cases of Enteric Fever ... ..	1	...	...	...	1	...	...	...
Cases of Other Infectious Disease ... ..	...	...	...	...	...	...	...	...
Venereal Cases ... ..	...	...	...	...	...	...	...	...
Total ... ..	4	...	...	...	4	...	...	...



TABLE V.

Return of Out-Patients and General Medical Work in the N'dabeni and New Brighton Native Reserve Locations during the half-year ended 30th June, 1904.

	N'dabeni Native Location.					New Brighton Native Location.				
	No. of Attend- ances on Out- Patients.	No. of visits to Patients in their own homes in Location, exclusive of Mid- wifery cases.	No. of Mid- wifery cases atten- ded.	No. of Pres- criptions dis- pensed.	No. of Dressings supplied.	No. of Attend- ances on Out- Patients.	No. of Visits to Patients in their own homes in Location, exclusive of Mid- wifery cases.	No. of Mid- wifery cases atten- ded.	No. of Pres- criptions dis- pensed.	No. of Dressings supplied.
Registered Residents	1,579	476	8	933	646	741	266	5	1,499	169
Others ...	28	...	...	18	10	20	33	...	...	...
Total ...	1,607	476	8	951	656	761	299	5	1,499	169

TABLE VI.

Return of Vaccinations and Inoculations in the N'dabeni and New Brighton Native Reserve Locations during the half-year ended 30th June, 1904.

	VACCINATIONS.											Inoculation with Haffkinine.	
	Total number of persons Vacci- nated.	Age of Persons Vaccinated.				Primary.		Secondary.		Result of Vaccinations			
		Under 12		Over 12.									
		M.	F.	M.	F.	M.	F.	M.	F.	Successful.	Un- successful.	M.	F.
N'dabeni Location	536	11	12	513	...	11	12	513	...	unable	to state.	...	...
New Brighton Location ...	44	4	2	29	9	24	10	9	1	44	...	6	...

NOTE :—All the above Vaccinations were performed on Registered Residents of the Locations.





# Report of the Medical Officer of Health for the Colony.

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## PART II.

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### Reports of District Surgeons upon Public Health and Sanitation.

Colonial Secretary's Office,  
Cape Town, Cape of Good Hope,  
29th August, 1904.

CIRCULAR No. 41 of 1904.

#### HALF-YEARLY HEALTH REPORTS FROM DISTRICT SURGEONS AND ADDITIONAL DISTRICT SURGEONS.

SIR,

I am directed by the Colonial Secretary to inform you that the Prime Minister has notified that in future the various Annual Reports will be rendered for the Financial instead of the Calendar year, and that, to this end, special Reports will be required for the half-year ended 30th June, of the current year.

I am accordingly to request you to be good enough to call upon the District Surgeon and the Additional District Surgeon (if any) to furnish his Report and Returns upon the state of Public Health and Sanitation in his District during the half-year ended 30th June, 1904.

The Report and Returns should be prepared and forwarded to this office *with the least possible delay*. The Report should deal with the general health and sanitation of the district, and the returns should furnish information upon the special subjects of Small-pox, Vaccination, the working of "The Contagious Diseases Prevention Act, 1885," Leprosy, and persons in receipt of Pauper Relief from Government.

While the Report, which should be as complete as possible, should be drawn up under the several headings, and in the order indicated below, so as to enable combination and comparison with other districts and with previous years to be made, the District Surgeon is invited to deal as fully as he may deem necessary with any matter which he considers deserving of special attention.

Should the District Surgeon not have at his disposal the information necessary to enable him to deal properly with a subject under any of the headings, and if you can ascertain the required particulars by correspondence with local or other authorities, or can in any other way assist him, I am to request that you will do so. In every case in which no information can be supplied under a heading, sub-heading or return, "nil" should be written against it.

The object aimed at in asking for these reports is to obtain, as far as possible, a complete, comprehensive and connected half-year's history of the health and sanitary condition of the Colony as a whole, as well as information particular to each district, espe-

cially in respect of any deficiency in sanitary control, or the existence of conditions inimical to health.

The following are the matters which, *inter alia*, the District Surgeon should treat of, and, in reporting on any sanitary defects that exist and their remedy, he should state the length of time they have continued and the steps, if any, taken by the Local Authority concerned to remove them:—

- (a) The condition of the water supplies, especially as regards their purity both at source and on delivery, their sufficiency, *the existence of any causes likely to lead to pollution, either at source or during storage or delivery*, and the steps which should be taken for bringing about improvement.
- (b) Sewerage and drainage.
- (c) The collection and disposal of night soil, slop-water, and household and other refuse.
- (d) Overcrowded dwellings and dwellings unfit for human habitation.
- (e) The management of slaughter-houses, butcheries, bakeries, dairies, and other trades affecting health.
- (f) The sale, storage and preparation of human food.
- (g) The keeping of cattle, swine, and other animals.
- (h) The order, cleanliness, and general sanitation of any Native Location or Camp of Natives under the control of any Local or other Authority within the district.
- (i) Cemeteries and burial grounds.
- (k) The abatement of nuisances generally.
- (l) What hospital accommodation exists in the district for the isolation and treatment of cases of infectious disease, its nature, extent, and to what local authority it belongs.
- (m) The presence or spread of infectious disease, especially Enteric Fever, Diphtheria, and Small-pox. The account of any outbreak of disease that has occurred in your district during the half-year should include information as to its situation; dates of its discovery and commencement and of the discovery and discharge of the last case; source of infection and how conveyed; number of persons attacked, with the number of deaths (distinguishing as far as possible between European and Coloured, adults and children), and the steps taken, with their effect, to suppress the disease, the isolation of the sick, the surveillance of those exposed to the infection, and under whose authority the steps were taken, *i.e.*, the Divisional Council, Municipality, Village Board, Resident Magistrate, Special Justice of the Peace, or by any of these combined, and in this connection it should be particularly stated whether the "Local Authority" has, in the District Surgeon's opinion, done all things necessary or possible for preventing or suppressing such outbreaks, and if not in what respect omissions have occurred.

With regard to outbreaks of Small-pox, the cases should be classified into *pre-vaccinated* and *unvaccinated*, with the number of deaths in each class. Where vaccinated cases have occurred it should be stated whether the operation was done *prior* to the exposure to infection or not, and also, if possible, the degree of success accom-



panying the operation. Information should also be furnished as to the steps taken for carrying out vaccination and re-vaccination, with their effect on the outbreak.

With regard to vaccination you are particularly requested to give the fullest account of the amount of success you have obtained in the performance of the operation.

Also in the case of outbreaks of Enteric Fever the probable cause of the outbreak, especially with reference to contaminated water, milk, or food supplies, should be discussed.

Also the total cost *incurred* in dealing with any outbreak of Small-pox should be given, distinguishing between that incurred directly by the Local Authority and that incurred directly by the Government.

With regard to outbreaks of Bubonic Plague, information concerning these is furnished to the Government through special channels, but I shall, nevertheless, be glad if you will supply information on the subject of the precautionary measures adopted in your district, and especially as regards the prevalence of rats and other rodents and the means adopted, and with what success, for their extermination.

Information is also desired regarding any special prevalence, with the cause, of any of the more unusual diseases, such as Scurvy, Epidemic Pneumonia, and the like.

**RETURNS.**—The annexed forms should be filled in as completely as possible:—Those marked B, D, and E by the District Surgeon with your assistance, and those marked A, C, F, and G by yourself.

You will be good enough before forwarding these returns to cause them to be carefully audited, in order to ascertain if they balance properly; that where figures are carried over from the previous year they are correct and agree with the returns of the *preceding* year; that all the figures are correctly entered in their proper columns, and that all additions, whether up-casts or cross-casts, are accurate, inasmuch as the omission of these apparently trifling precautions in regard to similar returns in previous years has entailed a large amount of subsequent trouble on both Resident Magistrates and District Surgeons, as well as causing great delay in dealing with the returns by this Department.

The Colonial Secretary wishes me to request you to give this matter your personal attention, in order that the information furnished may be as accurate and complete as possible, and that it may be returned to this office at the earliest possible moment, so that the Report on the Public Health of the Colony for the period referred to may not be unnecessarily delayed.

I have the honour to be,

Sir,

Your obedient Servant,

NOEL JANISCH,  
Under Colonial Secretary.

To each Resident Magistrate and  
Assistant Resident Magistrate.

A.—Return of Persons in receipt of Pauper Relief in the District of .....during the Half Year ended 30th June, 1904.

Name of Person.	Able-bodied or Infirm.	European.		Coloured.		Leper.	Lunatic.	Syphilitic.	Ordinary.	Form of Relief.		Number of days in receipt of relief.
		Approximate Age.								Indoor.	Outdoor.	
		M.	F.	M.	F.							
Total ...	...											

Dated at.....

.....1904.

.....

Resident Magistrate.

NOTE.—All Lepers, Lunatics and Syphilitics figuring on this Return should appear also on Return "G," the "Lunatic" Return and "E" respectively. If they do not, please explain to avoid querying.

N.B.—Before forwarding this Return kindly verify all the entries therein, and ascertain that all additions, both up-casts and cross-casts, are correct, in order to avoid querying.

B.—Return of Outbreaks and Cases of Small-pox also called Amaas occurring in the District of.....during the Half Year ended 30th June, 1904.

Locality of Outbreak.	Date of first Discovery.	Supposed Source of Infection and manner of Introduction.	Total No. of Cases Discovered.								Total No. of Deaths.								Total number of persons (healthy) kept under surveillance or quarantined.	No. of Guards employed	State whether outbreak still in progress, or, if suppressed, give date of discharge of the last case.	Name of Local Authority having charge of the Outbreak.	Remarks.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Dated at.....

.....1904.

.....

District Surgeon.

N.B.—Before forwarding this Return kindly verify all the entries therein, and ascertain that all additions both upcasts and crossecasts, are correct in order to avoid querying.



C.—Return of Expenditure incurred for the suppression of Small-pox in the District of.....during the half-year ended the 30th June, 1904.

SERVICE.					Expenditure <u>incurred</u> from 1st January to 30th June, 1904.			
					Directly by Government.		*Directly by Local Authority.	
Special Allowances or Payments to District Surgeon (exclusive of Vaccination) ... ..	...	...	...	...				
Travelling Allowances to District Surgeon do. ....	...	...	...	...				
Payments to Private Practitioners ... ..	...	...	...	...				
Travelling Allowances to District Surgeon, Vaccinating ... ..	...	...	...	...				
Special Allowance (if any) to District Surgeon for Vaccinating ... ..	...	...	...	...				
Payments to Lay Vaccinators ... ..	...	...	...	...				
Payments to Nurses, Guards, Police, &c. ... ..	...	...	...	...				
Cost of Provisions and Supplies ... ..	...	...	...	...				
Cost of Construction, Purchase or Rent of Hospital, Buildings, Huts, Tents, &c. ... ..	...	...	...	...				
Cost of Bedding, Clothing, Furniture, Utensils and Equipment ... ..	...	...	...	...				
Cost of Medicines ... ..	...	...	...	...				
Transport of Patients, Supplies, &c. ... ..	...	...	...	...				
Payments made in respect of Compensation for Infected Private Property destroyed ... ..	...	...	...	...				
Miscellaneous Expenses... ..	...	...	...	...				
Total ... ..	...	...	...	...				

Dated at.....  
.....1904.

.....  
Resident Magistrate.

\* Including any share of expenditure that may be claimed from Government under the provisions of  
• Act No. 23 of 1897.

D.—Return of Public Vaccination performed in the District of.....  
.....during the half year ended 30th June, 1904.

Names of Centres at which Public Vaccination has been performed.	Number of Persons Vaccina- ted by the District Surgeon.	Number of Persons Vaccine- ated by laymen under the in- struction of the Dis. Surgeon.	Total Number of Persons Vaccinated.	Age.		Believed to be successful				Unsuccessful.				Number of Primary Vaccinations.	Number of Re-vaccinations.
				Persons over 10 years of age.	Children under 10 years of age.	Males.		Females.		Males.		Females.			
						E.	C.	E.	C.	E.	C.	E.	C.		

NOTE.—Also please state the number of arm to arm Vaccinations performed.  
Also approximately the number of Vaccinations performed by Private Practitioners in the District.

Dated at.....  
.....1904.

.....  
District Surgeon.

N.B.—Before forwarding this Return, kindly VERIFY all the entries therein, and ascertain that all additions, both up-casts and cross-casts, are correct in order to avoid querying.

E.—Return of Cases under Medical Treatment under Part II. of “The Contagious Diseases Prevention Act, 1885,” in the District of.....  
.....during the half Year ended 30th June, 1904.

NAME OF PATIENT.	Manner of Treating.		Sex and Race.				Age.		†Number of days (if any) under treatment during 1903 (in the case of each patient).	Number of days under treatment during half- year ended 30th June, 1904. (in the case of each patient)	SYPHILIS. Condition of the Disease on coming under treatment.				Other Venereal Diseases.	** Seat of primary inoculation or sore.	RESULT.			
	In Hospital.	Outdoor.	Male.		Female.		Over 14 years of age.	Under 14 years of age.			Acquired.			Hereditary			Discharged Cured.	Died.	Lapsed from Treatment uncured.	Remaining un- der treatment on June 30, 1904.
			E.	C.	E.	C.					Primary.	Secondary.	Tertiary.							
Total																				

\* The name of each individual patient is to be filled in here, and the required particulars corresponding to it inserted in the proper columns opposite to it.  
† The patients entered in this column should agree with those returned last year as still remaining under treatment on the 31st December, 1903.  
\*\* The object in asking for this information is to ascertain as far as possible to what extent the disease is innocently acquired.  
NOTE.—In filling in this return, the District Surgeon should first enter all the indoor patients and then all the outdoor patients. This will greatly facilitate the work of abstracting the Return at this Office.  
N.B.—Before forwarding this Return kindly verify all the entries therein, and ascertain that all additions, both up-casts and cross-casts, are correct in order to avoid querying.

Dated at.....  
.....1904.  
District Surgeon.

F.—Return of EXPENDITURE incurred during the Half Year ended 30th June, 1904, in connection with Part II. of “The Contagious Diseases Prevention Act, 1885,” in the District of.....

SERVICE.	EXPENDITURE.		
	Incurred from 1st January to 30th June, 1904.		
1. District Surgeon's Expenses :—			
(a) Travelling Expenses ... ..			
(b) Fixed Commuted Allowance (if any) ... ..			
(c) Fees for Medical Attendance and Medicines ... ..			
(d) Other Charges (if any) ... ..			
2. Cost of Buildings, Construction and Repairs ... ..			
3. Rent of Buildings... ..			
4. Cost of Furniture, Utensils and Fittings ... ..			
5. Cost of Bedding and Clothing ... ..			
6. Cost of Provisions, Medical Comforts, Fuel, Light, Soap, Lime and other Supplies or Services ... ..			
7. Salaries and Allowances of Nurses, Attendants, Guards, &c. ... ..			
8. Payments made to Managers of General Hospitals for Treatment and Maintenance of C.D. cases ... ..			
9. Miscellaneous or Special Expenses ... ..			
Total ... ..			

Dated at.....  
.....1904.  
Resident Magistrate.



G.—Return of Lepers dealt with or living in the District of..... during the half year ending 30sth June, 1904.

	Number living in the District and on the Register on the 31st Dec., 1903.		Number of fresh cases registered during the half-year ended 30th June, 1904.		Total number of cases on the Register during the half-year ended 30th June, 1904.		Number removed from the Register during the half-year ended 30th June, 1904.										Number remaining on the Register and being still in the District on the 30th June, 1904.	
	M.	F.	M.	F.	M.	F.	Sent to Asylum.		* Died.		Disappeared or absconded.		Disease arrested or in abeyance.		Found not to be suffering from Leprosy.			
							M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Europeans—																		
Tubercular Leprosy ...																		
Anæsthetic Leprosy ...																		
Mixed Leprosy ...																		
Coloured—																		
Tubercular Leprosy ...																		
Anæsthetic Leprosy ...																		
Mixed Leprosy ...																		
Total ...																		

NOTE.—Are there any reputed lepers in the district who are not on the Leper Register ; if so, please insert particulars here :—

		Males.	Females.
Europeans	...	.....	.....
Coloured	...	.....	.....

Dated at.....

.....1904.

.....

Resident Magistrate.

\* It is requested that all persons whose names are on the Register be kept under observation, so that any removals from these causes may be immediately entered on the Register. This is especially desirable in the case of those suspected persons, in regard to whom the District Surgeon may have become satisfied that they are not suffering from Leprosy.

N.B.—Before forwarding this Return kindly VERIFY all entries therein and ascertain that all additions both up-casts and cross-casts, are correct, in order to avoid querying.

COLONY PROPER.

1. ABERDEEN.

DR. H. C. BEDFORD, DISTRICT SURGEON.

(a) The source of the Aberdeen water supply is a permanent spring; the water has a slightly brackish taste, but otherwise is good. Unfortunately it does not reach the town, to which it is conveyed in an open furrow in the same state. The fountain is on the opposite side of the river, so that the water has first to be brought down the river in which it is collected by a catch dam; this dam is mainly the cause of the pollution of the water; the water stands back in it for a considerable distance, several hundred yards, and is shallow. In summer, when exposed to the full glare of the sun it promotes the growth of what is called "slijk;" this rapidly decays and imparts a very disagreeable odour to the water, in some years to such an extent that it becomes unpleasant to walk alongside the furrows in the streets. The Local Authorities endeavoured to get rid of this nuisance by making a large sluice in the intake dam wall, and flushing the dam as often as opportunities occurred; this has improved matters a little, but the quality of the water will never be satisfactory unless they get rid of the dam and convey the water across the bed of the river in pipes. The water is also polluted to a certain extent in different ways as it runs through the town in the open furrows.

The above is taken from my report for 1897, and still holds good.

My remarks on questions (b) to (k) are the same as last year.

(l) There are two hospitals, the Contagious Diseases Hospital and the Small-pox Lazaretto.

The Contagious Diseases Hospital is situate to the south-east of the town, about 400 yards from the nearest house, and about 300 yards beyond it is the Lazaretto. The latter is a building consisting of two rooms, each measuring 12 feet by 12 feet; close to it is a room for the attendant, which is also used as a kitchen. The buildings are substantially built of brick under iron roof, but I consider they are too close to the town.

(m) The number of births registered during the period 1st January to 30th June, 1904 is as follows:—

European.		Coloured.	
Male.	Female.	Male.	Female.
40	33	37	37

The number of deaths registered during the six months ending 30th June, 1904, is as follows:—

European.		Coloured.	
Male.	Female.	Male.	Female.
17	13	22	25

Only three cases of Enteric were reported; all occurred during the month of January; no deaths were due to this disease. In town, only one case of Diphtheria was reported. The town and district have been free from Small-pox. Whooping Cough has been very prevalent, but there has been no fatal case. The chief causes of death have been diseases of the alimentary and respiratory systems. From Diarrhœa and Enteritis there have been 20 deaths (E.8, C.12); from Dysentery 5 (E.1, C.4); from Consumption 6 (E.3, C.3); from Bronchitis and Pneumonia 5 (E.3, C.2). Ten deaths were attributed to Convulsions (E.3, C.7); 3 were due to Cancer, all three Europeans. Death in three cases was attributed to premature births, and five were due to accident or violence.

Nothing has been done in the way of vaccination, except vaccinating the prisoners.

## 2. ALBANY.

DR. E. G. D. DRURY, Acting District Surgeon.

(a) The public water-supply is by intermittent service through mains fed by reservoirs of the following capacity:—

	Gallons.
Fort England ... ..	500,000
Hope ... ..	1,000,000
Hamilton ... ..	6,000,000
Douglas... ..	7,000,000
Grey ... ..	15,000,000
Milner ... ..	47,300,000

Since the last report the Municipality has undertaken the construction of a second reservoir at Slaai Kraal, situated higher up the stream that feeds the Milner reservoir, and estimated, when completed, to hold 150,000,000 gallons.

This work is in active progress, and when complete, will not only render the town secure of water in the heaviest droughts, but also will deliver water by gravitation to the highest parts of the town and location.

I am unable to report that any construction of filter beds is contemplated.

(b) Three sections of river bed, carrying off the storm water and drainage of the major part of Grahamstown, have been paved with heavy channelled blocks of concrete, protected on either side by rough stones bedded in cement and puddled with clay. This excellent piece of work has abolished the old sodden mud banks which formerly led the stream through the most crowded and poor streets, to the prejudice of the public health. The system has proved adequate to contain and withstand the rainfall of unusually heavy thunderstorms, and ensures an almost constant flow of a small stream sufficient to flush the channel. It is to be hoped that other parts of the river will be similarly treated.

(c) The Municipal Authorities have abandoned any attempt at a departmental system, but have taken two steps to organise the removal of night soil. They have prescribed a bucket of standard size and construction, for universal use; and they have submitted the town to contract, in four sanitary wards, each served by a licensed nightman, whose tender and scale of charges seemed most favourable to the Council.

The tank carts and system of collection remain unchanged and unsatisfactory.



No attempt is made to deal adequately with slop water, nor with household refuse.

(*d*) One or two cases of overcrowding have been dealt with, and amongst the Coolies especially; other cases occur.

(*e*) The slaughter-houses, with their defective flooring, and unsatisfactory burials of offal, remain unchanged. The question of Municipal slaughter-houses has been deferred by the Council for another six months.

The provision of Municipal wash-houses also continues to be shelved: in default of these, most unsuitable holes of water and parts of the river bed are made use of by Natives.

(*f*) The sale, storage, and preparation of human food is satisfactory.

(*g*) Nothing of moment to report.

(*h*) A new and excellent system of water supply for the locations has been introduced, which has solved the difficulty of a water rate. The mains are carried up the principal streets of the location and tanks erected at intervals, each under the care of a native water inspector. Any native who takes out a season ticket, quarterly or annually, at a fee of 5s., will be allowed to draw from the nearest tank for that period. Those natives who are too penurious to make this small outlay must send, as formerly, to the three public tanks on the outskirts of the town. The system is said to be appreciated by the natives, and to promise a considerable revenue to the town, sufficient to repay in time the cost of installation.

The locations are, on the whole, clean and in good order. The latrines are unchanged, and the streets are still used as public rubbish-depositing sites. Convictions for Kafir beer-making are numerous.

(*i*) It is contemplated to enlarge the existing cemeteries, one of which is overcrowded, without changing the site. The cemeteries are in good order, and not detrimental to the public health.

(*k*) The well-informed and energetic Sanitary Inspector appointed two years ago, continues to hold office.

(*l*) The Victoria Fever Hospital, with sixteen beds placed in eight rooms, properly isolated, has been informally opened this half year. It provides comfortable and adequate accommodation for infectious disease, in place of the galvanised iron building in rear of the General Hospital formerly used for such cases. Up to the present, only cases of Diphtheria, eight in number, have been nursed there, the Enteric Fever patients being treated in the general wards. The Hospital is controlled by the medical and nursing staff of the Albany General Hospital, without any extra expense of management.

The nine beds for contagious diseases are still available, until the formal closing ordered by Government. As a result of this instruction, 50 to 60 cases per annum of Syphilis, Chancre, and Gonorrhœa will have to be housed in the location.

(*m*) The notifications for the half-year have been 45 in number. Of these, 26 were Enteric Fever (two in the district and the rest in town), and 19 were Diphtheria (five in the district and 14 in town); of these, three Diphtheria cases were dual notifications being removed from the Divisional Council's area to that of the Municipal Council. The total number of cases of Diphtheria was therefore 16.

The cases in the district merit the title of an outbreak of Diphtheria. It was not formally investigated by the Sanitary Authorities, but the facts gathered from private patients and enquiries made on my vaccination tour at four different farms, shew that all the cases were drawn from three closely-related families.

In the end of March a girl suffering from a "white sore" throat was treated as follicular tonsilitis, which was cured in three days, and left no sequelæ. No bacteriological examination was made. In end of April, a younger sister died suddenly of heart failure, after two weeks' illness with a bad smelling ulcerated sore throat. No bacteriological examination took place. In time the baby developed faucial Diphtheria, as confirmed by Dr. Edington, was inoculated and recovered.

In the first week of July Diphtheria appeared in the second farmhouse, distant five miles, where a cousin of these children developed faucial Diphtheria, confirmed by Dr. Edington, and recovered. It was shown that a pillow or two cats might have conveyed the infection from the first farm. The baby of this family fourteen days later showed laryngeal Diphtheria and died. This child had been moved to the third farm, where another cousin and a native nursemaid took faucial Diphtheria and made good recoveries.

At the time of the second case, end of April, I learn that at a farm close by a case of very foul-smelling ulcerated sore throat in a male native applied to the lady of the house for treatment. She has had considerable experience, and from her



description there is little doubt that this was a case of Diphtheria. The native was from a distance, on the tramp. It is probable that here, as so often, the peripatetic native was responsible for the outbreak.

Of the Diphtheria in town, nine of the cases occurred in one large college. The first case was notified on April 27th, after a bacteriological examination of the throat, and the last case discharged at the end of June after four weeks' isolation.

All throats were swabbed and declared clean by the Bacteriological Institute before the boys were returned to school. The water, milk, and contents of the tuck shop were cultivated for Diphtheria, with a negative result, and all the drains overhauled.

From the month of February there had been a succession of follicular sore throats, and, in my opinion, the outbreak is to be traced to one of these cases taking on the more virulent form, unknown to the medical officer in the absence of cultures.

The follicular sore throats continued side by side with the Diphtheria cases, but gave negative results to culture.

There were no cases of Small-pox nor of Bubonic Plague.

### 3. ALBERT.

#### (i) ALBERT.

DR. JAS. T. BOLGER, DISTRICT SURGEON.

(a) The water-supply for the first half of the current year was abundant, and of its usual excellent quality. I have before drawn attention to the fact that after heavy rain the water is decidedly stained, which points to pollution by surface or, at all events, by insufficiently filtered water. So far no ill effects have been traced to this defect.

(b) During January last the rainfall tested the drains severely; in fact, the latter quite failed to carry off the storm water in the upper part of the town satisfactorily, three houses at least being flooded, a passing but most undesirable inconvenience. Steps were taken to render a recurrence unlikely, but until we are fortunate enough to get a heavy downpour, it is not possible to say whether these measures are adequate. In other parts of the dorp the drains are in better order than in some past years, stagnant water and offensive smells being, so far as I have noticed, nearly absent.

(c) There is nothing new to be said on this subject, so far as night-soil is concerned. As regards the removal of slop-water, my personal experience is that it is admirably done. I do not, however, know whether the Municipality insist on occupiers providing receptacles for storing water until the cart calls to remove it. If this is not done, evidently slop-water will find its way to the street or back-yard, and the object of the whole system of removal will be defeated in some measure. I am not Health Officer here (there is no such functionary), and so am not in a position to know accurately how public health matters stand, a thing which does not conduce to a good Annual Report.

(d) If the number of vacant houses is any evidence, I should say overcrowding is not a present evil.

(e) I know of no defects in connection with the management of slaughter-houses, butcheries, bakeries, etc.

(f) As a market, generally a well supplied one, is held on five mornings in the week, the food storage question is not a great difficulty. I have, however, seen cold storage meat on a cart which was devoid of covering, the said meat naturally being a perfect godsend to a swarm of flies. Doubtless cooking ought to kill any microbes thus deposited, but the sight was not calculated to give one a good appetite for dinner.

(g) No swine are kept in the dorp so far as I know. As regards cattle, I have only the Sanitary Inspector's reports as a guide, that official's verdict being practically always favourable.

(h) The remarks made last year still apply.

(i) The appearance of the cemetery has been considerably improved. It is not, nor has it ever been, a danger to the public health.

(k) The dust nuisance was alleviated by watering the streets as long as the water-supply permitted, a very welcome and very sensible innovation. Though for drinking and household purposes the supply was ample, it was not sufficient during the whole six months for dust-laying, much to the regret of all.



(*l*) There is no hospital accommodation at all. The opinion formerly expressed that some white people had been inoculated accidentally by natives (*e.g.*, nurse-girls) suffering from Syphilis, I now hold even more strongly, because I have seen additional probable instances, therefore my regret at the absence of any contagious diseases hospital is undiminished.

(*m*) There has been no small-pox during the half-year. Typhoid we are seldom without during the first half of any year; in fact, I may say never. There were a few cases of Diphtheria, and some of Scarlet Fever, but neither disease became epidemic.

(*ii*) SUB-DISTRICT OF VENTERSTAD.

DR. ALBERT P. COATES, ADDITIONAL DISTRICT SURGEON.

The general health of the District for the six months has been fairly satisfactory.

(*a*) The water-supply has been sufficient, but then the period under consideration is usually the rainy season; the failure, if any, takes place later in the year.

(*b*) There is neither sewerage nor drainage.

(*c*) The collection and disposal of household refuse is well carried out by the Municipal Council; but that of night-soil and slop-water is left to individuals.

(*d*) Overcrowded dwellings are gradually becoming a thing of the past.

(*e*) The management of slaughter-houses, etc., is now carried out in a satisfactory manner, reflecting credit on the Local Authority, under whose surveillance they are.

(*f*) The sale, storage, and preparation of human food are mostly in the hands of private individuals, and only to a very small extent.

(*g*) Very few animals are kept in the village.

(*h*) The native locations—two in number—are well looked after, and are in good order.

(*i*) The cemeteries are fairly well kept, but do not look very well, as, owing to the scarcity of water, tree-planting is useless.

(*k*) The village is fairly well looked after by the Local Authority, and I believe they intend, in the near future, to still further improve the present state of affairs.

(*l*) In the beginning of the year the Local Authority—the Municipality—erected a small building of wood and iron, to be used as an isolation hospital in case of any outbreak of infectious disease. It was used during the Small-pox outbreak for housing the sick. It is well built, in a favourable position, and should be quite adequate for the needs of the place. It belongs to the Municipality.

(*m*) There were two cases of Enteric, both on the same farm, one mile from the village. The first case occurred in April, and the second in May; both recovered. The source of infection could not be traced.

A military camp was situated at the homestead for a considerable time during the latter months of the war, and one case of Enteric had occurred amongst the troops.

There was no Diphtheria.

There was one outbreak of Small-pox in the village. The first case was discovered on 1st May, the rash having appeared that morning. The last case occurred fourteen days later, amongst the contacts who were isolated, and was discharged on 20th June. All were pre-vaccinated, were mild cases, and no deaths occurred. I have no doubt in my own mind that the infection in this case was carried from the farm Rheboksfontein, where an outbreak was just dying out earlier in the year, and which was fully dealt with in last year's report. I pointed out at the time that owing to the failure of the Divisional Council to pay out the natives in the outbreak at Klipfontein, for clothing destroyed, that in future natives would almost certainly hide their personal effects, to prevent destruction, and I have no doubt this did actually occur at Rheboksfontein; so that for a matter of a few pounds, a very great deal of expense and inconvenience has been incurred.

On the discovery of the outbreak the sick and contacts were separated and quarantined. All were vaccinated and re-vaccinated until it was apparent they were immune. Two contacts developed the disease subsequent to vaccination, and were mild in the extreme. One contact—a baby six months old—had not been previously vaccinated—was vaccinated and re-vaccinated unsuccessfully, and did not take the disease. Vaccination was performed daily—gratis—for several weeks



after discovery of the outbreak ; but the cases of Small-pox were so mild that many residents did not believe it was really Small-pox, and did not avail themselves of the opportunity of being vaccinated. It is really quite impossible to give any useful idea of how far vaccination was successful, for patients are not compelled to, and very seldom do, present themselves for inspection.

The total cost incurred by the Local Authority was £72, that by the Government, nil.

There was no Bubonic Plague, nor are there any rats in the village.

No unusual disease, such as Scurvy, etc., has occurred.

#### 4. ALEXANDRIA.

DR. P. B. GRENFELL, DISTRICT SURGEON.

(a) Water-supply.—The water is collected chiefly in tanks, galvanised iron and underground tanks. There are also some wells and dams. The water from the wells and dams is not fit for human consumption, as the wells are not properly fenced, and all sorts of impurities get into the dams. The coloured population of the village drink from these dams and wells.

Owing to the drought in the early part of this year nearly all the tanks in the village became empty, and the villagers had to get their water from the tanks around the Courthouse and from the borehole in the gaol. This latter water supply is a very large one, and the water is only slightly brackish. The large dam in the village must become very polluted on account of the large number of native residences on the slopes that drain into this dam. These huts should most certainly be removed.

(b) There is no system of sewerage or drainage.

(c) No system exists for the disposal of night-soil, etc., cesspools being used only.

(d) Some of the Hottentots' huts are frequently overcrowded.

(e) No actual slaughtering takes place in the village, but animals are brought into the village directly they are killed, and the refuse from these animals is deposited in open shallow holes in the ground. Now, if this is done, I see no difference whether an animal is killed in or outside of the village. I think that all animals should be killed and cleaned outside the village boundaries.

There is one bakery, which is well conducted.

(f) The sale, storage, and preparation of human food is satisfactory.

(g) Cattle in many cases are kept in the yards adjoining residences. Swine are also kept in the village.

(h) Nil.

(i) Cemeteries are maintained in good order.

(k) Nothing has been done to abate existing nuisances.

(l) There is no hospital accommodation.

(m) There have been no cases of Diphtheria or Variola. One case of Enteric was brought into the village from Graham's Town in June, and up to the end of June there were no fresh cases, but after this a serious epidemic of Enteric Fever arose. My report is only able to cover the last three months of the half-year from the time of my appointment as District Surgeon.

There has been no vaccination carried out.

The general health of the District has been very good.

At the beginning of the year there was an epidemic of some sort of fever on the farm Klipfontein, about twelve natives contracting the sickness, which was probably Enteric in a mild form, but no medical man saw any of these cases. I think it would be very beneficial if the Village Management Board was placed in a working condition, as at present nothing has been done by this Board. If this were done, some progress in the public health of the village would assuredly be the result.

#### 5. ALIWAL NORTH.

(i) ALIWAL NORTH.

DR. FRED. FULSS, DISTRICT SURGEON.

Since my last report for the year 1903 little has occurred which calls for special remark. Small-pox has not shown itself again during the last six months, and the only infectious disease that was notified was Enteric Fever, of which there were twenty-one cases.



(a) The Aliwal North Water Scheme, we are informed, will be in full working order in November of this year. I will report fully on this matter in my next report.

(b) No proper drainage or sewerage system exists.

(c) Night-soil is collected in galvanised iron pails, and the contents deposited in trenches. There should be a duplicate system of pails.

There is no proper system for the removal of slops and rubbish; the sooner the Municipality take this in hand the better. It could be so managed as to be made self-supporting.

(d) Nil.

(e) (f) and (g) Same as in my last report.

(h) The Municipal Location, under the control of the Local Authority, is excellently kept. A Location Superintendent has been appointed, and he is responsible for the order, cleanliness, and general good health of the location. All unvaccinated people found in the location are regularly sent to me by the Superintendent, to be vaccinated.

The location known as "Greatheads" is dirtily kept, and seems to me to be under no proper supervision.

(i) and (k) Same as in my last report.

(l) No hospital for infectious diseases exists, and the need for one is urgently felt. A Lock Hospital is also greatly required.

(m) During the six months there were twenty-one cases of Enteric Fever. There were also some cases of Chicken-pox, but in the majority of cases these were so mild that they were not reported on.

#### (ii) SUB-DISTRICT OF JAMESTOWN.

MAJOR C. G. WOODS, R.A.M.C., ADDITIONAL DISTRICT SURGEON.

General Health and Sanitation of the District.—The general health has been exceptionally good, and the sanitation of the District fair.

(a) The water-supply is derived from wells, and is apparently good, but is very scarce.

(b) Sewerage consists of privies or cesspits which must in time pollute the wells. I recommend pails or buckets.

(c) and (d) Nil.

(e) (f) and (g) Good.

(h) Fair.

(i) Good.

(k) Fair.

(l) and (m) Nil.

#### (iii) SUB-DISTRICT OF LADY GREY.

DR. H. R. FORSTER TOWNE, ADDITIONAL DISTRICT SURGEON.

The general health of this town and District from January to July has been fairly good.

In January the epidemic of Gastro Enteritis, which was prevalent in the town and in the location, reached its height, and subsided with the February rains. Enteric Fever also disappeared in February; it has now recommenced, there being a few cases in the location; several deaths have been reported from Enteric Fever and Gastro Enteritis; undoubtedly the insufficient and bad water-supply is responsible for these epidemics.

Scarlet Fever has been prevalent for the past four months. Fortunately, the disease has been of a very mild nature, and no deaths have been reported. The Public School and the Poor School were closed for a fortnight.

Five cases of Diphtheria were reported, one of which was in the town, and four in the country; one death was reported.

I performed Public Vaccination in April; 301 persons were vaccinated, the results being good.

Many natives have been vaccinated who have left the District seeking work.

No Small-pox exists in the District.

There are no cases under the Contagious Diseases Prevention Act.

No cases of Leprosy were reported.

There are no paupers in the Gaol or outside.



(a) Water-supply.—I have nothing to add to my last report. It is much to be regretted that the Municipal Council have not been successful in their endeavours to raise a loan for the purpose of building a reservoir. The drought has been responsible for much sickness, poverty, and distress. The reservoir would cost about £3,000, and would make Lady Grey a healthy and prosperous town.

(b) (c) (d) (e) (f) (g) (h) and (i) *Vide* my last report, to which I have nothing to add.

(k) Abatement of Nuisances generally.—A good and sufficient water supply and extra police are needed in order to diminish and suppress existing nuisances.

(l) *Vide* my last report, to which I have nothing to add.

(m) The epidemics of Gastro Enteritis, Enteric Fever, Diphtheria, and Scarlet Fever have been already mentioned.

The Municipality have done all in their power to suppress these diseases.

## 6. BARKLY EAST.

### (i) BARKLY EAST.

DR. A. R. WILHELM, DISTRICT SURGEON.

(a) The various sources of the water supply have not changed, but the supply has been more abundant during the last six months than in the previous year. Various plans, with detailed surveys have been made to bring water into Barkly East, but as these would involve an expenditure from £10,000 to £12,000, I do not think, in the present financial state of the country, the fulfilment of these plans will be realised at an early date, necessary though they be.

(b) No changes have taken place.

(l) The two Small-pox Lazarettos, which had been destroyed, have been repaired.

(m) Diphtheria.—In the town one case was notified on the 19th of February, and another on the 29th of May. In the district, a case occurred at Kinmee on the 29th of March, and on the 14th of May a case was notified from Berridale, and on the 18th from the neighbouring farm Blarney. Thus the total for the whole district is only five, showing great improvement when compared with the previous year. Scarlet Fever has remained in this district since the outbreak in the previous year. In all, seventeen European cases were notified, of which thirteen were in the country and the other four in the town. It is remarkable that not a single native case was seen, though I have reason to believe that this disease is often spread by natives. I have personally been often told that the native children on farms have first had a similar disease, and later the white children in the house have taken it. Several of the cases of Scarlet Fever were complicated with Diphtheria. In March, a case of Puerperal Fever was notified from Chevy Chase in the Highlands, and another in Barkly East in June.

In June, one case of Varicellā was reported.

Of Small Pox, the district has been free, and the consequence is that only one infant has been vaccinated, and that one unsuccessfully. Personally, I am a great advocate of vaccination, but certainly not of the manner as it has been carried on in this district. For the last few years no regular vaccination tour has been made by the District Surgeon; nor do I see the use of such a tour. The District Surgeon appears at a centre and finds that there is nobody to be vaccinated; and as long as there is no system by which the Registrar of Births and Deaths is enabled to check the vaccinated from the unvaccinated infants reported him, and as long as there are no prosecutions, so long will it be useless to send the District Surgeon on a tour, except in the time of a Small-pox scare. With the native infants there will always be a difficulty, but it should be one of the regular duties of the police on their patrols to find out which natives are vaccinated and which are not.

The white children should present no difficulties. Every infant is brought to one of the churches for christening, and on that occasion the child could be vaccinated, but a fortnight's clear notice should be given by the parents to the District Surgeon or Practitioner, so that he may provide himself with a fresh supply of lymph. Furthermore, with an additional District Surgeon at Rhodes, a Practitioner at Belmore, and one at Reedsdal and the top ends of Sterkspruit, and as Longskloof via Barkly Pass is within easy reach of the District Surgeon of Elliot, I do not think it is asking too much of the parents to see that their children are vaccinated; but I do not think they will do so until Small-pox or the law frightens them.



No unvaccinated child is supposed to be in any public school, according to the school regulations; but again there is no system by which a check is kept on this regulation. Would it not be a simple matter to make the teacher at every public school keep a register in which is stated the age of the child, the date of vaccination, and the name of the vaccinator, keeping as a voucher the certificate of the vaccinator until the child leaves the school. This book and certificates might be inspected by the school inspector on his ordinary visits to the school.

Enteric Fever.—In the town of Barkly East nine cases were notified; of these, two were Europeans in the actual town itself, and the rest were native cases in the location. The two Europeans were imported cases; the one a resident of this district had nursed a brother with Enteric in Elliot, and ten days after his return, became ill. The other was an inhabitant of Johannesburg who had nursed a son in the Wodehouse Division and became ill here on the day of his arrival. These two cases were not fatal. While the white population of the town has been practically free from Enteric, the natives who used the same water supply have suffered fairly severely, seven cases being reported which occurred in six different huts, out of a total of about sixty; one of these cases was fatal.

Cases of Enteric were notified during the six months, in the following manner:

	Natives and Coloured.	Europeans.
April ... ..	3 cases	Nil.
May ... ..	3 cases	1 case
June ... ..	1 case	1 case

In the district five cases were notified at the following dates and localities:—

At Bergplaats, 27th February, one coloured case.

At Locksly, 30th March, one case in, a Kafir.

At Grootvlei, 26th April, one coloured case, and at the last place another coloured case on the 26th June.

These last two cases received or brought their infection from the Barkly East Location.

#### (ii) SUB-DISTRICT OF RHODES.

DR. CHARLES W. CALDWELL, ADDITIONAL DISTRICT SURGEON.

The health of the district has been good: seven cases of infectious disease occurred in the half-year, of which three were in the village.

(a) Drinking water is obtained from four fountains—two of which are situated in the river bed. The water is good and the supply sufficient.

Owing to the absence of any protection, these fountains are liable to pollution from horses and cattle.

(b) No system of drainage exists.

(c) Every "W.C." has its own cess pit, into which slop water is emptied. Household and other refuse is deposited in three places set apart for that purpose by the Village Board of Management; these places are—a spruit above the village, the bed of the river opposite the centre of the village, and the bed of the river somewhat lower down, the second of these being the one most used.

(d) Overcrowding exists to an extent such as one finds in an up-country village.

(e) There are two butcheries with bakeries attached; they are kept fairly clean. The majority of the inhabitants are their own butchers and bakers.

(f) No cause for complaint under this head.

(g) No restrictions are placed on the keeping of cattle, and swine in the village.

(h) The native location is small, and not clean, and there is no attempt at sanitation.

(i) The burial ground is not overcrowded.

(k) No nuisances exist, with the exception of those referred to at the end.

(l) No hospital accommodation exists.

(m) There were three cases of Scarlatina, of which two were in the same family; three cases of Diphtheria were discovered, and one of Enteric Fever. The Diphtheria cases were sporadic: it was impossible to trace the connection between the two cases of Scarlatina. The Enteric, in my opinion, was caused through drinking polluted water.

No general vaccination has been carried out in this district for over five years.

No cases of Scurvy or epidemic of Pneumonia occurred.

I would recommend that the fountains, the water of which is used for drinking purposes, should be fenced around and covered in, so as to prevent the water being polluted by animals.



The depositing of household and other refuse in a spruit liable to be washed out at any time by a heavy rain, and in the river bed, should not be allowed to continue; some other site should be chosen, and one not inimical to public health.

## 7. BARKLY WEST.

### (i) BARKLY WEST.

DR. G. A. HEBERDEN, DISTRICT SURGEON.

During the first six months of this year, the health of the village and district has been remarkably good. There has been no outbreak of infectious disease, and with the exception of one case of Enteric Fever, caused by drinking water from the Vaal River at a time when the water was stagnant from prolonged drought, a clean sheet could have been returned. This case was sent to Kimberley Hospital as soon as the case was diagnosed, there being no hospital in Barkly at that time.

(a) The water supply for drinking and washing purposes is, as a rule, the Vaal River—with the exception of a few wells and rain water tanks, which latter last for a month or so after a rain. The Vaal River is again getting nearly dry, and the water unfit for drinking, and unless the rainy season is earlier this year than last, there will probably be many cases of Acute Diarrhoea, and perhaps Enteric. Filters are almost unknown and few people will take the trouble to have their drinking water boiled. The water from the wells is, although hard, exceptionally pure, and there is no difficulty for any one getting sufficient for drinking, but people prefer, as a rule, to drink the river water, and to take the risk, which has hitherto proved slight.

(b) to (g) I have nothing fresh to add to the last report.

(h) The native location is kept fairly clean, but it is my opinion that all natives should be removed from above the village to the properly surveyed location below—unless they are in a position to pay the sanitary rates, they being within the village area; and in addition to this, I would suggest the ground (where they are at present squatting) be surveyed and put up for auction, with a small reserve price to those natives of long standing who have erected decent houses. At any rate, their sanitary fees should be insisted upon, which would have the result of either enriching the Village Board or making the natives reside in the proper location. I have advocated this for years, but it seems a waste of energy—although a most important point to the health of the village.

(i) The cemetery and burial ground is well kept and much improved.

I think it only fair to mention that during the past two years there has been extreme difficulty in obtaining sufficient convicts to undertake the sanitary duties of the village. This is due to the fact that as soon as a man is convicted, he is sent off to some convict station—Cape Town or elsewhere—and the district that has suffered from the crime (whatever it may be), instead of getting any compensation, becomes doubly the loser, and to such an extent has this nuisance arrived that it is impossible to obtain convict labour any more, and an excellent gaol, capable of accommodating about 40, and has exceeded 60 convicts, is left almost empty, to enable Cape Town to be supplied with sufficient labour.

(m) There has been no vaccination during the last six months. I am able to report that Scurvy seems to be gradually dying out from my part of the district, but the usual time is during the summer months.

### (ii) SUB-DISTRICT OF KLIPDAM.

DR. T. L. SHIELDS, ADDITIONAL DISTRICT SURGEON.

There has been no change to record during the half-year, under any of headings from (a) to (m).

There has been no case of infectious disease.

No vaccination has been authorised during the half-year.

Scurvy has been prevalent to about the same extent as in former years. The River Diggers' Cottage Hospital has not yet been re-opened.

The general health of the district has been good; much less sickness than usual occurred, and no case of serious illness.



## 8. BATHURST.

DR. CECIL E. JONES PHILLIPSON, DISTRICT SURGEON.

The general health of the district has been exceptionally good during the half-year. No serious epidemics, with the exception of Whooping Cough have called for any enquiry. Whooping Cough was responsible for a number of deaths among native children, through the complication of Broncho-Pneumonia. A journey, for the purpose of enquiry into the cause of the deaths, was undertaken on June 22nd, 1904, to the area between Shaw Park and Trappes Valley.

Measles, Chicken Pox and Mumps were prevalent during May and June, but few cases came before my notice. No cases of Small-pox, or Amaas, or Leprosy have been reported to the end of the half-year.

The number of persons in receipt of pauper relief has been much curtailed, owing to some having left the district, and the change of the pauper ration, which was not appreciated.

No cases of contagious disease under the Prevention Act, 1885, have been treated by me.

The village of Bathurst, nine miles distant from Port Alfred, has no M.O.H., although a Municipality exists.

(a) The water supply, for drinking purposes, is totally dependent on rainfall, while for other purposes, good springs exist.

(b) Nil.

(c) The collection and disposal of night-soil, slop-water, and refuse is well carried out under supervision of the Town Ranger.

(d) Nil.

(e) The management of slaughter-houses, butcheries, bakeries, dairies, and other trades affecting health is satisfactory.

(f) The sale, storage, and preparation of human food is well-conducted.

(g) A "pound" has been established under control of the Municipality, and cattle, swine, and other animals are no longer seen roaming.

(h) The native location is kept in an exemplary condition.

(i) The cemetery is well-situated, picturesque, and is not over-crowded.

(k) The abatement of nuisances is under the control of the M.O.H. and the Town Ranger.

(l) No hospital accommodation exists. A cottage hospital is much wanted.

(m) No Enteric, Diphtheria, or Small-pox occurred. Broncho-Pneumonia following Whooping Cough caused many deaths.

Plague.—Nil; persons notified as arriving from infected areas are kept under observation for ten days.

## 9. BEAUFORT WEST.

DR. A. J. WESTBY, DISTRICT SURGEON

(a) The water supply remains the same as last year. As a good rain fell in January, the water for drinking and irrigation purposes was almost normal. During the latter part of June it again began to get scarce.

(b) (c) (d) Same as last report.

(e) Butcheries, bakeries, and other trades affecting the health are all cleanly and well managed.

(f) Same as last year.

(h) The location, which is under the management of the Municipality, is orderly and kept fairly clean. There has been a new church erected which is an ornament to the place and contrasts strangely with the surrounding mud huts and tin shanties which are still in existence.

(i) The cemeteries are all in good order. The trees suffered severely from the drought.

(k) The abatement of nuisances is improving.

(l) There is no hospital accommodation.

(m) There was no Small-pox. Forty-nine cases of Enteric occurred, one of Scarlet Fever, and two of Diphtheria, and one case of Leprosy was reported.

The Enteric occurred in the beginning of the year, after the rain, and dropped off towards the month of April.

There was no vaccination performed in the district during the six months. Vaccination in the town is a farce, as the people will not come.

## 10. BEDFORD.

DR. R. A. ROSS, DISTRICT SURGEON.

(a) The water supply is partly stored in tanks from rain water, and partly obtained from a mountain spring which is pure at its origin, but gets polluted in its passage through the furrows, owing to the fact that pigs and other animals are allowed to wallow in them, as well as horses, cattle, etc., to drink out of them. As previously recommended in my report for 1902, the only satisfactory solution to the difficulty of water pollution, which is constantly occurring, is the erection of a reservoir in the "Maastrom Estate," the water being laid on to the town by a proper system of pipes. It may be safely stated, that not until this is done, will the public health of the town be properly safeguarded.

(b) There is no system of sewerage or drainage.

(c) The bucket system has been in force for a few years, and is answering admirably, as compared with the old system of cess pits. Slop water, household and other refuse has to be deposited at certain sites appointed by the Municipality.

(d) The dwellings are good, and not overcrowded.

(e) The slaughter-house, butcheries, bakeries, and dairies are kept in a satisfactory manner.

(g) Cows are kept in kraals at night and driven to the commonage during the day, although too often they are seen wandering about the town both by night and by day. The same applies to horses. Swine are seldom kept in town, and sheep and goats in proper kraals.

(h) The native location leaves much to be desired, as there is not only considerable overcrowding of the huts, but there is also no proper system of disposal of night-soil, the result being that the excreta from Typhoid patients is thrown outside the hut, and then disseminated broadcast over the location and possibly the town. For this very reason natives should not be allowed to be interspersed throughout the town, as in this way the water collected in tanks is liable to become polluted.

(i) The cemetery for the town is well kept, and private burial places in the country have never been complained of.

(k) The contamination of the water-supply is the principal nuisance, and it remains unabated.

(l) There is no hospital accommodation for either town or District.

(m) Infectious diseases were not very prevalent during the half-year. There were a few sporadic cases of Typhoid Fever—none of Diphtheria or Small-pox.

A vaccination tour of the town and district was made, but was poorly attended, and until it is compulsory for the vaccinated to report themselves after eight days, it is impossible to say what measure of success has been attained. From the results of a few private cases one would judge that the lymph supplied was, on the whole, very satisfactory.

## 11. BREDASDORP.

DR. L. SCHLOSS, DISTRICT SURGEON.

Since the election of new members for the Village Board of Management marked improvements can be reported. Regulations in accordance with the model bye-law have been adopted, streets and furrows cleaned, trees all along the streets planted, and new sluits laid out. The old cattle dam and the old washing place, situated in the midst of the village and never cleaned for years, have been removed. A new reservoir has been built, and iron pipes lead the water about 1,500 yards to a place outside the village, where a proper washing place, and a small iron house to keep the necessary utensils, have been erected. The pipe is fitted with several tubs, a special tub for each stand. The cost, of material and work amounted to less than £75, so saving the village from the smell of the dirty water formerly running through the streets.

Satisfactory as this is, it is more to be regretted that no improvements could be made as regards the most important matter, the water-supply. The water, pure and splendid at its source, is conveyed in a furrow, open to all kind of contamination, although it is fenced in for about 200 yards. Walking up the furrow, one can see heaps of excrement, not only of cattle and sheep, but also of human origin, inside and outside the wire fence. Wind and rain wash and blow



all kind of decaying matter in the furrow. Unless the water is properly conducted by pipes, nothing will prevent the contamination. It was intended to build a reservoir and to lay out pipes, but from want of money the work could not be carried out. As long as this state continues, it will always be a source of disease.

The epidemic of Typhoid Fever, prevailing from February till May, as well as many cases of Gastric and Enteric inflammation, may be caused by the polluted drinking water. Eight cases of Typhoid in the village and ten cases in the district came under treatment, and there is reason to suppose that many more cases have occurred, considering that during this half-year about 100 death cases have been registered, and only twenty medical certificates were handed in, to ascertain the cause of death. Although the disease appeared in a mild form, two cases were complicated with profuse hæmorrhage of the bowels, and another case proved fatal through neglect and fault in the diet of the patient.

A few cases of Scarlatina and Diphtheria have been reported. Two cases of Tetanus happened in April and May in the village, both fatal, one the puerperal form, and the other following a wound on the foot, attracted by working garden ground. Beside these, the general health of the district was good.

No vaccination was performed in the district during the half-year, with the exception of Struis Bay.

As regards other points the remarks of last year's report still hold good.

## 12. BRITSTOWN.

### (i) BRITSTOWN.

DR. T. D. HOMAN, ACTING DISTRICT SURGEON.

(a) (b) and (c) As formerly.

(d) There is no overcrowding.

(e) As formerly.

(f) The sale, storage and preparation of human food is satisfactory.

(g) Cattle and other animals are kept in a few yards adjoining the houses.

(i) and (k) As formerly.

(l) No isolation hospital exists for the treatment of infectious diseases.

(m) One case of Enteric Fever occurred in a man who was living in a tent in the village commonage. The man had lately come from De Aar, where he had been living in a house in which a patient had died from Enteric Fever.

One case occurred in the location, and one was brought in from the country district.

Three cases of Enteric Fever were reported from the country district, two occurred in one tent, *i.e.*, people who were working on the railway construction works.

The Diphtheritic outbreak mentioned in last year's report continued during January, February, and March. Four cases were treated, and one death took place on the 3rd January. All cases were treated with anti-Diphtheritic serum, and those in contact with Diphtheritic patients received prophylactic injections. One case of Diphtheria occurred on the 30th June, and was treated with anti-Diphtheritic serum. Two cases of Scarlet Fever occurred in a family who had lately come to the village. They were strictly isolated in their own home, and no other case occurred.

There was an epidemic of Whooping Cough which caused several deaths amongst young children.

There was also an epidemic of Mumps; a large number of those attacked suffered from Orchitis.

Dr. Hopkins, the District Surgeon, who is at present on leave, made a vaccination tour in April, but as no second visit was paid I cannot give returns.

The centres visited were:—Biesespoort, Elandsfontein, Kareehoek, Lemoenkloof, and Wildealsput.

The chief causes of death during the six months were:—Pneumonia and Bronchitis, 6; Diarrhœa and Dysentery, 18; Syphilis, 4; Phthisis, 3; Whooping Cough with Bronchial complications, 15.

Amongst other duties, ten post-mortem examinations were held, and eight sentences of corporal punishment were witnessed. Twenty-eight cases of Syphilis were treated in the Contagious Diseases Hospital. As soon as the symptoms of



Syphilis have been relieved the majority of patients lapse from treatment. This allows a number of Syphilitics to wander about the country, as there appears to be no law to compel these people to continue the anti-Syphilitic treatment after they leave the hospital.

The following supplementary report has been furnished by the Resident Magistrate of Britstown:—

The water-supply of the town is derived from two fountains, one of which is situate at the east end of the town, and the other also on the east side, but about 300 yards away from the nearest house; in both cases the Municipality has taken due precautions against pollution. The first-named fountain was until very recently the main supply for the town; the actual source is securely walled in, and is therefore fairly safe from any contamination, and, provided that people draw their supplies from the service pipe, there is little danger of any infectious diseases arising from the water; the outbreaks of Typhoid Fever in the past are attributed to the fact that irresponsible servants have drawn water for domestic purposes from the furrow lower down which is used for watering horses, cattle, sheep, etc. The second fountain has only of late been opened up, and is for the present merely fenced in with barbed wire; it is the intention of the Municipality to develop this fountain, and a scheme is now on foot to have the water pumped into storage tanks on the high level just on the outskirts of the town, whence it will be conducted in pipes through the principal streets and laid on to the different houses; so far as I am able to judge, there are no nuisances anywhere in the neighbourhood of either of these fountains which could affect the water at its source.

There are no sewerage or drainage gutters in the town; domestic slops are removed away on to the town commonage. The collection and disposal of night-soil is entirely in the hands of the Municipality, and is satisfactorily conducted.

In regard to slaughter-houses, I may state that in two cases, slaughtering is actually conducted in the town; there is no regular Inspector, but an officer of the Council makes a periodical inspection of the premises, and, I am informed, cleanliness has in both cases been studied. The question of a Sanitary Inspector for the Municipality is at present under the consideration of the Council.

The native location is situate about a mile away from the town, and is controlled by the Municipality, and is in fair order.

In regard to the sale, storage and preparation of human food, I may state that there were no convictions during the half-year for food adulteration.

In conclusion, I might point out that in the absence of any Municipal Regulations, the Council has been handicapped in not being able to prosecute in certain isolated cases where nuisances have been found to exist in the town, but rules and regulations are at present being considered by the Government, and after their promulgation the Council hopes to control the general condition of the town in regard to sanitation, etc., with greater efficacy.

#### (ii) SUB-DISTRICT OF DE AAR.

DR. F. C. FITZGERALD, ADDITIONAL DISTRICT SURGEON.

(a) The water-supplies are mainly obtained from a number of wells scattered over the town. On the railway ground the water is all pumped up by steam-pumps into tanks, and these are hermetically sealed and periodically cleansed. The water is pure.

The wells outside the railway camp are about twenty-five in number, and there are six wind-pumps erected, the remainder being worked by hand pump or rope and bucket; some are not yet in a finished condition, and receive surface matter as contamination; others are well covered in.

A Municipality has been proclaimed at De Aar, excluding the railway property, and six Councillors have been elected, and they are now busy framing their bye-laws and regulations and the general details of a newly formed Council.

With regard to the quantity of water, there is still a great scarcity, the drought being still prolonged, only a very small quantity of rain having fallen—not half-an-inch following on two years, during which no rain fell in this district.

In many cases it is difficult to get water for domestic purposes, and there is hardly any to spare for ablution. This, of course, applies more particularly to the native location. The Municipality will, no doubt, deal with the water question at an early date.

(b) Sewerage and Drainage.—There is no sewage or drainage system at De Aar. There are sluits which are kept clean, but these are for carrying off storm



water. There is also a large sluic to the east of the railway line, which carries off the water used in washing out the engines; this sluic is kept clean.

(c) Night-soil, Slop-water, and Refuse.—Night-soil is removed by a private contractor, removals taking place two, three or more times a week as is necessary; the work is satisfactorily done. Slop-water, household and other refuse are received into pails and buckets during the day and removed daily to a dumping ground situate more than one mile east of the railway camp.

(d) Overcrowded Dwellings.—There are no overcrowded dwellings and no houses unfit for human habitation.

(e) Slaughter-houses, etc.—There are no slaughter-houses proper in De Aar. All slaughtering is done away from the town, and the dressed carcasses brought into De Aar. A reduction in the quantity of frozen meat used in De Aar has taken place, more local grown meat being slaughtered.

There are three butcheries in De Aar, and all are well kept.

There are two bakehouses in De Aar, one new one with cafe and confectionery attached. Both are clean and well managed.

There is no dairy at De Aar, and no other trade except storekeeping is carried on here.

(f) Food, etc.—There is no fault to be found with the sale, storage and preparation of food. Ice is now obtained in the hot weather daily, and fish and other articles of food are preserved.

(g) Cattle, Swine, etc.—Cattle and swine are not kept in De Aar. Swine are kept in an enclosure on the outskirts of the town, but are away from any residences. The only other animals kept in town are horses, donkeys, and dogs.

The stables are well looked after, are healthy and well ventilated. There has been no outbreak of disease amongst horses during the past year. The stabling of other animals is quite satisfactory.

(h) Native Locations.—There is one big location in the township of Friedlander now called the Municipality of De Aar, and the condition is the reverse of satisfactory; there are no latrines for the natives, and they go squatting all over the place, but I hope that the new Council will rectify this matter at an early date. The condition of affairs remains the same as stated in my report for 1903.

Order is maintained in the locations by native constables, etc.

(i) Cemeteries and Burial Grounds.—There is only one cemetery in this town, which is under the control of the Railway Department; everything is kept very neat and in good order. There is a native cemetery, but it is under no control and is very untidy, but this I hope to see taken in hand at an early date.

(k) Abatement of Nuisances.—These when found to exist are promptly removed or otherwise dealt with.

(l) Hospital Accommodation, etc.—No special hospital exists in De Aar for the treatment of infectious disease. A hospital belonging to the Railway Department accommodates twelve beds, but is a general hospital. When a case of infectious disease arises special hospital or tent accommodation has to be provided, sometimes causing great delay in isolating disease.

(m) Infectious Diseases.—About half a dozen cases of Enteric Fever occurred during the past six months, with two deaths. They were mostly treated in their own homes. In no case was infection spread, and no second case occurred in the same house.

There were no cases of Diphtheria or Small-pox during the last six months.

Vaccination.—Public vaccination in town and district was carried out by the District Surgeon in March, April and May of this year, over 250 cases being done at a cost of £23 0s. 6d. I have reason to think quite 95 per cent. were successful. This includes primary and re-vaccinations.

Scurvy.—A few cases of Scurvy occurred locally, but scarcely deserve mention; they recovered quickly under anti-scorbutics.

Bubonic Plague.—No case of Plague occurred here.

Whooping Cough.—A rather severe epidemic of Whooping Cough broke out this year, but it was not possible to ascertain the numbers, as many were not treated by a medical man. The epidemic is about over, and there were not many deaths, the disease taking a mild course. The school was closed for about a month.

General Remarks.—Notwithstanding the prolonged drought the general health remains good. A large number of natives have left for other places, or to seek work. We still have our very frequent dust-storms.

Mortuary Accommodation.—I regret that it is not yet possible to erect a suitable Mortuary at De Aar. The same primitive method of making a post-mortem examination of a body has to be done on the floor.



## 13. CALEDON.

DR. A. J. ALBERTYN, DISTRICT SURGEON.

(a) The town of Caledon obtains its water-supply from several springs in the Zwarteberg mountains. The water is good, being pure and palatable and not liable to pollution either at its origin or during transit. The water at present is quite adequate for the requirements of the town. The springs are under the control of the Local Municipality, and situated within the area of the said Municipality. The water is taken and stored in a reservoir at the fountain head, and is then led in pipes and distributed to the various houses for domestic use.

The water for irrigation purposes is also obtained from the same source, and is stored in a reservoir containing some 6,000,000 gallons, and from thence led in open furrows through the town and distributed to the inhabitants at stated hours.

(b) The sewerage and drainage of the town are in a few instances carried out by means of patent pipes, but the method generally adopted is that of removing by carts.

(c) The system in vogue for the removal of night-soil is the bucket system; the night-soil is deposited in suitable pits dug for the purpose about two miles from the town.

The slop water is also disposed of in the same way.

Household and other refuse is collected and deposited about one mile from the town on the north side. This is not at all a suitable place, as the north wind prevails in Caledon, which blows directly across the dumping ground towards the town. I have already drawn the attention of the Municipality to the fact.

(d) There is not much overcrowding of dwellings, nor are there any dwellings unfit for human habitation. Occasionally crowds of Malays visit Caledon, and remain over for some two or three days. During their stay a great deal of overcrowding has taken place, resulting in numerous complaints from inhabitants. Steps will be taken to obtain prosecutions in cases where overcrowding is permitted.

(e) The management of butcheries, bakeries, dairies, and other trades affecting health is very satisfactory.

I have no reason to take any exception whatever to the way in which these institutions are conducted.

An improvement has taken place with regard to slaughter-houses. There are three, which are located some distance from the town in a healthy area.

(f) I have no reason to take exception to the manner of sale, storage and preparation of human food.

(g) The keeping of cattle, swine and other animals is very systematic. Occasionally they stray about the town. The condition of affairs, however, in that respect is very satisfactory.

(h) Genadendal and Bera are the only native locations in this district, same being about twenty miles distant. The Moravian Mission Society controls the same, and has already obtained a high state of efficiency in regulating cleanliness and general sanitation.

The visits every month of the Resident Magistrate, who proceeds thither to preside at the Periodical Court, has a very marked influence over the community generally. The inhabitants number about 3,000. The houses and huts are cleanliness itself. The water-supply is excellent. The system of removal of night-soil, refuse, etc., is improving, and good order prevails.

(i) Two cemeteries exist at Caledon, being well below the town. The soil is sandy and the drainage excellent. In country districts, of course, the old practice of burying the dead on the farm is resorted to. In many instances small family cemeteries are to be seen. These are located well from the actual homestead, and kept enclosed and in good repair.

(k) Nuisances generally are abated by means of prompt action on the part of the police, who are always on the look-out for any contravention of the Municipal and other regulations. From time to time periodical visits are made by me and also by the police, of premises, etc., and in some instances gross neglect on the part of certain householders have resulted in convictions in the Magistrate's Court.

(l) There is no infectious diseases hospital accommodation, except the hospital under the Contagious Diseases Act.

(m) Caledon has been fairly exempt from infectious diseases. Cases of Enteric Fever, Diphtheria, Measles, Whooping Cough, and Scarlet Fever have come under my notice, but these are not very prevalent.



No epidemics of Small-pox were prevalent, or are in existence

The Local Authority, I am pleased to say, although rather handicapped in some respects, is endeavouring to do its utmost in dealing with outbreaks of the various infectious diseases.

#### 14. CALVINIA.

DR. J. SMUTS, DISTRICT SURGEON.

(a)—(l) No change since my last report.

(m) (1) Enteric Fever.—A few isolated cases occurred, with no deaths.

(2) Diphtheria.—About a dozen cases occurred, three deaths resulting.

No cases of any other infectious disease occurred.

#### 15. CAPE.

(i) CAPE TOWN.

There is no District Surgeon for Cape Town. The reports of the Medical Officers of Health for the Municipalities of Cape Town and Green Point and Sea Point will be found under Part III., among the reports of Local Authorities.

(ii) SUB-DISTRICT OF D'URBANVILLE.

DR. L. F. BICCARD, ADDITIONAL DISTRICT SURGEON.

(a) The village has an abundant supply of pure fresh water, obtained from springs within the Municipal area. These springs are well covered in, and the water led away in galvanised pipes for distribution from house to house. The supply of the district is generally from springs and artesian wells, and although the water in some parts is somewhat brackish, the quality on the whole is excellent. The fact that Typhoid has been absent in the district (excepting at D'Urban Road) proves a good water supply.

(b) Nil.

(c) Night-soil is still buried in gardens, and must be injurious to health where the ground is small. I trust, however, that this will soon be remedied by a regular system of removal.

Household and other refuse are removed by the Local Authority, and deposited outside the village.

(d) I believe that there are instances of overcrowding, and that this will be attended to when the Municipal regulations come into force. I know of no houses unfit for human habitation.

(e) The slaughter-house is clean and well kept. The two butcheries are not all that is to be desired, but will be under control of the Divisional Council Inspector when the local regulations come into force.

(f) Nil.

(g) Cattle, swine, and other animals are still allowed to run loose, but I trust that this nuisance and source of injury to public health will soon be removed.

(h) No location or native camp exists within the district.

(i) The two burial grounds are both in good order; but are too close to the churches, and a new site has, therefore, been applied for to Government, and it is to be hoped that there will be no delay in the granting of such new site.

(k) Nothing else has been done besides what is stated under the different sections above. The outspan which has hitherto been in the centre of the village has now been removed.

(l) There is no hospital accommodation, except a small galvanised room, to be used as a lazaretto, by the Local Authority, in the event of an outbreak of Small-pox.

(m) The district has practically been free from infectious diseases, with the exception of an outbreak of Typhoid Fever in the vicinity of D'Urban Road. There

were several families attacked by the disease, and all could be traced to the water supply. In one instance the pollution of the spring was clearly traced to the deposit of heaps of stinking manure along the main road, right in front of the dwelling houses. I would advise the Divisional Council to be very stringent in this matter, because it is decidedly a danger to the public health.

In the beginning of January, one case of Small-pox was discovered at Dassenberg, on the boundary of the Malmesbury Division; the patient, a coloured lad, was isolated at home with his parent, a guard placed over them, and the contacts vaccinated. There was no further outbreak. In this case, infection was traced to a case in the Malmesbury Division.

(iii) SUB-DISTRICT OF WOODSTOCK.

DR. G. H. STEYN, DISTRICT SURGEON.

(a) Water Supply.—Since the last health report issued by my predecessor, nothing practical has been done to rectify that crying need, viz., insufficiency of water supply. During the summer months, many residents suffer great inconvenience by their taps running dry. With the increase of population, that hardship will be felt more and more every year, until a final, definite, resolve be made by our city fathers to adopt one or other of the great water schemes. Woodstock is supplied partly from Rondebosch springs and partly from Cape Town sources. The quality of both supplies leaves very little to be desired. Maitland is supplied in part from the main, from boreholes and from a few surface wells. Yzerplaats is very badly off, for there are too many surface wells, always a dangerous lurking place for germs of infectious disease.

(b) Sewerage and Drainage.—The present system is very unsatisfactory, but owing to insufficiency of water for flushing purposes, is no doubt the best, under the circumstances. It consists of pipes from the houses discharging into open drains along the side of the streets. Fortunately, our energetic department keeps a watchful eye on these open drains. At Maitland and Yzerplaats, kitchen slops, etc., are emptied out on the premises and allowed to soak into the soil, with the worst consequences.

(c) The Council now carries out the work of disposal of night soil, departmentally, and deserve the thanks of the public for the great advance on the old contract system. The removal is effected in the night in covered wagons, of the individual pails, there being a double set of pails, and disposed of at the depositing site near Durban Road Sand Hills.

(d) Overcrowding.—Nil.

Dwellings unfit for human habitation.—These are condemned, and inmates ordered to vacate.

(e) Slaughter-houses, butcheries, bakeries, and dairies are inspected and the necessary steps taken to enforce regulations if these are infringed.

(g) Swine are not allowed to be kept on the premises.

(h) The greater part of our native population live comfortably in galvanised huts away from the white population. Their wants as to order and cleanliness and general sanitation are, as far as possible, seen to.

(i) Cemeteries and burial grounds.—These are properly managed.

(k) Abatement of Nuisances generally.—Notice is given to offenders, giving time limit for abatement of such nuisances, and failing compliance, the Council institutes proceedings, or otherwise executes the work and recovers costs. Over 1,000 cases were dealt with last year.

(l) No hospital exists in this district for the isolation and treatment of infectious diseases.

(m) Infectious Diseases.—There has been no epidemic of infectious disease for the last six months, excepting a few sporadic cases of—

Enteric Fever ... ..	56 cases.
Scarlet Fever ... ..	19 „
Diphtheria ... ..	12 „
Erysipelas ... ..	1 „
Leprosy ... ..	1 „

16. CARNARVON.

DR. LEOPOLD KATZ, DISTRICT SURGEON.

The general health of the district during the past half-year has been satisfactory. There has been no severe epidemic, although there was an outbreak of Small-pox amongst Kafirs only in the location, and a small epidemic of Diphtheria



amongst farmers' children and the diggers at Uintjesberg, and among European children at the farm Biesjeslaagte.

The severe drought which prevailed during the past year was somewhat abated by a good rainfall on several days in January, but since then the drought has been still going on and the outlook is very gloomy. Both dams of the village are almost dried up, forage is very scarce, and the veld is in rather a bad condition, so that fresh milk, for instance, is very difficult to obtain, and then only for 6d. a bottle.

(a) The water supply has remained unchanged throughout the period covered by this report; the water, though somewhat brackish, is, however, of good quality, and up to date also of sufficient quality.

(b), (c) and (d) No alterations.

(e) I can only repeat the complaint brought forward in last year's report.

(f), (g), (h) and (i) No complaints.

(k) With regard to this point, I have to draw attention to the previous year's report, and may add that (1) no midwives; and (2) no trained nurses are obtainable; and (3) that something should be done to diminish the enormous swarms of flies, which, in my opinion, cause far more cases of Enteric Fever than contaminated water. For instance, the bye-laws should be enforced, that all carcases and dead animals should be buried, or, far better, burnt (and not left lying in the open air). Kraals should be kept a good distance from dwelling houses, and a cheap non-poisonous stuff should be supplied by the Government, free of charge, at cost price, with which to kill flies.

(l) No change.

(m) There were five cases of Small-pox in the location amongst the natives, the first case of which was discovered on the 1st January; all were discharged on the 6th February, no death having occurred. A few cases of Diphtheria occurred in the village, as well as on several farms. In all these cases the Local Authorities did their best to prevent the spread of any kind of infectious disease; especially during the time when Small-pox was in the village, the Municipality did its utmost to help the District Surgeon to prevent the spread of that disease. Vaccinations were performed on a large scale, all contacts were isolated, and, of course, vaccinated.

During the past half-year, 413 persons were vaccinated, but I regret not being able to ascertain with what results. I may add that I noticed that Europeans do not turn up at the fixed time as the law prescribes, and that a good many well-educated and leading people of the village refuse to send their children for vaccination, although I brought that fact to the notice of the Local Authorities.

There were no cases of Scurvy or Epidemic Pneumonia; I noticed, however, a good many cases of Pleurisy, subsequently followed by Empyema, as the result of an infection by the Influenza Bacillus.

Under the Contagious Diseases Prevention Act of 1885, fourteen persons were treated, no Europeans. Seventy-three births were registered during the half-year.

Europeans.				Coloured.			
Male.		Female		Male		Female	
Leg.	Illeg.	Leg.	Illeg.	Leg.	Illeg.	Leg.	Illeg.
14	0	17	0	12	10	14	6

Deaths occurred: 78. Europeans, male 7; female 4. Children under one year of age, male 2; female 2. Coloured, male 18; female 22. Children under one year of age, male 8; female 15.

As will be seen from the above, the death rate of native infants is over 50 per cent., due, in my opinion, to insufficient and improper feeding.

## 17. CATHCART.

DR. W. M. BORCHERDS, DISTRICT SURGEON.

The general health of the District of Cathcart has been good. One case of Leprosy was detected in which the feet and hands were maimed, but, as the leper escaped, probably to Cala, he was not isolated.

There were two cases of Syphilis in the district among natives, both in the tertiary stage, hence no further spread has taken place.

(a) Water-supplies.—Quantity and quality are excellent, but there are no filter beds. An economical and efficient one could be made by utilising the area above the present intake weir, by excavating about 100 yards and filling it with gravel. This would last about three years without replenishing the gravel, and so screen off the sludge so marked on the candles of filters. This should not cost more than £100, and would be money well spent.



(b) Sewerage and Drainage.—Of this there is none. There exist three paved drains, V-shaped, which carry off the water from its old collecting area and depositing it in a new one lower down where it will become a nuisance to residents lower down the street. An efficient water-carry system should be laid down with the bacterial destruction of the sewage, for which the situation of the town is admirably suited, and would be more economical than the present system in vogue; thus rendering Cathcart a health resort of the first order, as it has the climate and railway connection.

With an efficient system this place might become a great educational centre as well, as the school has peculiar attractions to make the town, if only the Town Council could see their way to the more economical method of sewerage and drainage.

(c) Collection of Slop-water, Night-soil, Household and other Refuse.—Slop-water is collected by private contract and taken away in a barrel and deposited on the outer slopes of the town, but the majority of people pitch it into the yards or gardens as most convenient. In a few cases the bath and kitchen waters are run into the streets, thus becoming a nuisance to the neighbours, which has been going on for two years or more, and in spite of repeated complaints, nothing is done by the Town Council to abate the nuisance, which can only be done by an underground system of pipes. The matter is perfectly plain to everybody except the City Fathers.

(d) Overcrowded Dwellings and Dwellings Unfit for Human Habitation.—A few of these exist, but as it seems to be nobody's business to look after this matter, it still goes on, and has been so for years.

(e) Management of Slaughter-houses, etc.—Nothing has been done in this section to supervise any of these industries, but as my report on the enlargement of the cemetery has evidently awakened the Town Council, something may be expected in the near future.

(f) The Sale, Storage, and Preparation of Human Food.—Nothing is done in this respect, but the two butcheries are well conducted and clean.

(g) The keeping of Cattle, Swine, and other Animals.—All animals are allowed to be kept, provided they are not a nuisance or injurious to public health.

(h) Order, Cleanliness, General Sanitation of Native Locations.—The Cathcart and Goshen locations are well laid out, and cleanly. Sanitation is after the type of savages.

(i) Cemeteries and Burial Grounds.—The native cemetery at Cathcart is in danger of being washed away, and has been so for years. It only requires a few good storms to expose the contents of the graves nearest the ravine. This I have reported on officially, but nothing has been, nor is likely to be, done. Application was made for the extension of the European cemetery because it was nearly full. I reported on the situation, and for sanitary reasons recommended a new site for such time as when the present one, laid out by the Government land surveyor, was full. This did not meet the wishes of the Town Council, with the result that they find 183 vacant graves, and at the present death rate of six per annum, it will take about 30 years to fill. The matter has now dropped, and a cyclone fence has replaced the stone wall.

(k) The Abatement of Nuisances Generally.—The regulations provide for most cases that occur; but it is generally only when they, *i.e.*, the nuisances, affect a member of the Council, that anything is done.

(l) Hospital for Isolation.—One did exist, but is now used for a cattle shed. Tents are used in case of any epidemic which might arise.

(m) Enteric Fever.—In town: Two Europeans. In country: Two Europeans and one Native. Total, five. Adults, three; children, two. Adults: European two; coloured, one. Total, three.

All necessary precautions were taken to prevent the spread of the disease; in only one case, *i.e.*, father to child, was it extended.

Sources of infection in each case were due probably to the noisome smells emanating from the slop-water deposited at or near the homestead. In no case was it due to food or water pollution. There were no deaths in these cases.

Diphtheria.—There were four cases, all children. One in location; three in country, in each case probably due to emanations from filth round the homestead. Total deaths, three; recovery, one.

In two cases it was too late to do anything with Antitoxin, as the patients died a few hours after being first seen, and on the eighth day of illness.

In neither of the above were the local authorities required to take any steps.

There have been no cases of Small-pox during the half-year, and no vaccinations, which is to be regretted, as this, if done annually, especially among the



natives on the border and territories, would save a large expense by preventing the occurrence of Small-pox; for example, when I took over the duties of District Surgeon, I found that there had been no vaccination since 1895. It was recommended, but not approved, by the Civil Commissioner, with the result that within a year, Small-pox broke out at various centres, costing over £200 to suppress, of which the exchequer provided five-eighths, whereas a vaccination tour would cost from £30 to £60. The moral is obvious, and from a business point of view, indisputable. With regard to the general health of the Colony, there is no doubt but that an expert adviser ought to visit each town and, after minute inspection, to give a public lecture on the sanitation of the town, and advise the best means of dealing with it and its approximate cost. It will not be necessary in the large centres, where men of intelligence are always advocating sanitary reforms, but it is in the smaller villages such as Catheart that some authoritative person, under Government recommendation, would do a lot of good in this respect. We may write a hundred reports and have meetings, but it is like one crying in a wilderness, for the amount of impression it makes on the average Town Councillor.

## 18. CERES.

DR. G. C. MUNNIK, DISTRICT SURGEON.

(a) The water supply is of excellent quality, both at source and on delivery, which is by means of pipes. An extensive native location is still supplied by open furrow.

(b) Sewerage and Drainage.—Nil.

(c) Night-soil is collected by pails and disposed of by burial outside the town. This, however, is not carried out in case of the coloured population. Household and other refuse is removed by Municipal cart.

(d) Over-crowded dwellings and dwellings unfit for human habitation are not sufficient for serious attention.

(e) and (f) No remarks.

(h) Satisfactory.

(i) No deprecatory remark to make.

(k) The old order of things as regards night-soil still obtains in the coloured section; however, no nuisance that merits special notice exists.

(l) A small lazaretto, capable of accommodating about eight cases, exists under Municipal control.

(m) Small-pox.—Nil.

Diphtheria.—Nil.

Enteric Fever.—Two sporadic cases occurred on outlying farms. The general health of the district was very good.

In the matter of sanitation, the Hamlet of Prince Alfred, in this district, may be referred to here, as its inhabitants seem to be quite indifferent as to what they drink. Their water, of great purity, is derived from mountain springs, and is delivered in open furrows dug in alluvial soil, no attempt having been made to cement or macadamise these furrows, and consequently considerable stagnation and pollution occur. Enteric Fever has been of frequent occurrence there.

No vaccination has been carried out during the last 18 months in this district.

Four persons were in receipt of pauper relief from Government.

## 19. CLANWILLIAM.

DR. ALFRED A. HAYES, DISTRICT SURGEON.

I am pleased to be able to report that the past half-year has been fairly healthy in this district.

With the exception of two very mild cases of Scarlet Fever, two of Enteric Fever, and one of Diphtheria, the district has, to my knowledge, been free from zymotic disease. Unfortunately, I must mention that Pulmonary Tuberculosis is largely on the increase amongst the natives, principally affecting the females, and, in my opinion, direct contagion is a much more potent agent in its dissemination than heredity, which appears to act more as a predisposing cause.

Europeans, up to the present, have shown a very slight susceptibility to the action of the germ, and it is difficult to assign a reason for this, unless the fact that the practical non-association of whites with coloured people may act as a powerful factor in hindering the dissemination of the contagion.

(a) The water furrow, which supplies the village with drinking water, is probably in a better condition than I have ever known it, owing to the fact that care has been recently taken to keep it clean and in repair, and animals are not now allowed to trespass freely on it. It is a pure and wholesome stream at its source from the Jan Dissels River, and only suffers pollution in its course, while the velocity of the stream safeguards it.

A scheme is now on foot to supply the village with drinking water in pipes, which will not only be an advantage in supplying a pure fluid, but will also be a great household convenience.

(b) There is practically no drainage or sewerage. The drainage from the gaol is disgraceful.

(c) Night-soil, etc., is collected and removed to a safe distance by Municipal carts.

(d) Great improvement in respect of overcrowded dwellings has taken place in recent years.

(e), (f) and (g) Satisfactory.

(h) The location is well looked after by local police.

(i) Position of cemeteries is unsatisfactory, but nature of soil prevents harm resulting.

(k) Slight improvement is noticeable in the abatement of nuisances.

(l) No hospital accommodation exists.

(m) There has been no outbreak of any infectious disease, but as previously mentioned, only a few isolated cases of Scarlet Fever, Enteric, and Diphtheria have occurred.

All the cases, except one of Enteric, were among Europeans, and one European died of Diphtheria, and one of Enteric.

I believe everything possible has been done to limit the spread of the diseases, but no doubt many cases occur that never come to the notice of the District Surgeon or any Local Authority.

As stated in previous reports, an application was sent to the Colonial Secretary asking for authority to vaccinate in the district, but the application was not approved. I should strongly urge the present Ministry to authorise vaccination to be proceeded with, as although Clanwilliam has never yet been affected with Small-pox to my knowledge, there is no knowing when it may not make its appearance.

## 20. COLESBERG.

DR. R. K. TAIT, DISTRICT SURGEON.

The town of Colesberg is situated in a kloof, surrounded by mountains on the north, east, and west. It slopes down from the north to south, and a large sluit runs through the town, and carries away flood water.

(a) The water supply is good and sufficient. The fountain is cemented in, and the water is brought into town through iron pipes. Hydrants are placed at different parts of the town for the use of the inhabitants.

(b) The sluit running through the town takes away any surplus rain water. There is no sewerage or drainage scheme in use.

(c) Night-soil is taken away by a contractor, and slop-water and other refuse by the carts of the Local Authority.

(d) There is no overcrowding, nor are any dwellings unfit for human habitation.

(e) The slaughter-houses are at the bottom of the town, 300 yards from the nearest houses, and are clean, and in good order. The butcheries, bakeries, etc., are also kept in thorough sanitary order.

(f) The sale, storage, and preparation of human food are good. I periodically examine all natives who work therein.

(g) Cattle and other animals are kept in kraals at the outside of the town.

(h) The location is under the Local Authority, and is situated about 500 yards from the bottom end of the town. It is kept very clean, and is considered one of the best locations in the up-country. All sanitary arrangements are thoroughly looked after.



(i) Cemeteries and Burial Grounds.—There are three of these, viz., the town, military, and native cemeteries. A new town cemetery has been made, but is not in use yet.

(k) There are no nuisances.

(l) There is a lazaretto three miles out of town in Kamp Kloof for cases of Small-pox. It is a zinc building of two rooms, and can accommodate five patients. It belongs to the Local Authority, is splendidly situated, and has an excellent water supply.

(m) Enteric Fever.—The district has been free from this disease.

Diphtheria.—Diphtheria broke out at a cattle post named Swartpoort, on the farm Haasfontein,  $6\frac{1}{2}$  hours from Colesberg. A family of poor whites lived there. Two children died without medical aid. The case was reported to the Magistrate, who ordered me to proceed at once to the place. I found three children suffering from Diphtheria. I injected anti-toxin serum, and gave medicine, and had the cases isolated. They all made a good recovery, and there was no other outbreak in the district. These cases I saw on the 22nd July; on the 30th they were better. All necessary steps were taken by the Divisional Council to stamp out the disease.

Small-pox.—A case of Small-pox broke out in town on the 31st January, 1903.

A Basuto boy had come from Rouxville, O.R.C., *via* Aliwal North in the train. He complained of pain in the back and headache. I suspected Small-pox, and had him sent to the lazaretto. In two days the rash came out. He had a comrade with him, and he acted as attendant; both had been vaccinated. There was no further outbreak, and the lazaretto was closed on the 6th March, the case being discharged cured. All necessary steps were taken by the Municipality. Vaccination was performed through the entire district. I consider about 98 per cent. are successfully vaccinated.

The total cost of the Small-Pox outbreak was £40 0s. 6d.

No cases of Bubonic Plague occurred.

## 21. CRADOCK.

### (i) CRADOCK.

DR. P. C. DE WET, DISTRICT SURGEON.

(a) Water Supply.—The drinking water is derived from springs about nine miles distant. The water is quite pure, but of late has proved insufficient, owing to the diminution caused by the severe droughts. The Local Authorities have been compelled to limit the supply to a certain number of hours daily. In the case of the Queen's Central Hospital, this has proved most inconvenient, as such an institution needs a large and continuous supply of fresh water. I think it would be wise to lay on a special pipe to the main, and I understand this suggestion is to be placed before the Town Council by the Hospital Secretary.

(b) Sewerage and Drainage.—The town possesses storm drains only.

(c) Disposal of Night-soil.—The duplicate system of sanitary tubs is in use. The tubs are cleaned weekly and replaced by a freshly disinfected tub; in a few instances they are emptied bi-weekly. The management is under the direct control of the Town Council, and the work carried out in a thoroughly clean and sanitary way. Slop-water and refuse are removed by Council carts two or three times a week from each house, and in some cases daily.

(d) Overcrowded Dwellings.—The Coolies (Natives from India) are most troublesome in this respect; their houses are dirty and their habits by no means cleanly. They procure a livelihood chiefly as vendors of vegetables and fruit, and consequently are a menace to the public health. I think it would be a wise precaution if they could be compelled to live in a settlement apart from the European inhabitants, and then regularly inspected and supervised by a competent man. The Native Location compares most favourably with those of other towns: the space is, however, somewhat limited in the north (town) end.

(e) Slaughter-houses.—The local abattoir is clean, but has no proper water supply: the floors are consequently not thoroughly flushed as they should be. Butcheries, bakeries, etc., are well-conducted.

(f) Sale and Storage of Human Food.—A large quantity of frozen meat is sold in this town, and owing to the low price, the majority of the people eat it. I know of no ill effects as yet traceable to its consumption. Tinned foods are also largely used. As a protection to those who make use of such food, more especially infants,



I think that manufacturers of patent and other tinned foods should be compelled to print the date of manufacture on the tins used. They could easily be compelled to do so by placing a heavy duty on all undated food preparations.

(g) Keeping of Cattle, etc.—Very few animals are kept in the town itself. Stables are inspected regularly by the local Ranger.

(h) General Sanitation of Native Location, etc.—The natives are kept in good order, and the only fault of the settlement is that the huts are too crowded in a small section, and rather too close to the town. I have always maintained that natives should be compelled to report every case of illness immediately to the Inspector, so as to avoid all possibility of infection of Europeans. Until such a course is adopted and rigorously carried out, I consider the location a perpetual menace to the public health. I have suggested what appeared to me a suitable system in previous reports.

(i) Cemeteries, etc.—The burial grounds are well-situated, and there is no fear of pollution of water from this source.

(k) Abatement of Nuisances.—This department is under the control of the Town Ranger, Location Inspector, and finally myself, as Health Officer. Reports are sent in every month by all the Municipal officials.

(l) Hospital Accommodation for Infectious Diseases.—The Council Hospital for Small-pox consists of three wards, and is capable of accommodating some fifty natives. It is situated at the south of the commonage, about a mile-and-a-half from the town. The Contagious Diseases Hospital has been emptied of all patients by order of the Government. All syphilitics are now to be treated as out-patients; such economy appears to me to be decidedly dangerous. A case of syphilis remains in a state of contagion for some months, and if the patient is not segregated, he or she is almost certain to propagate the disease by contact. I do not think there is any possibility of stamping out this loathsome disease amongst natives, except by the most careful and thorough isolation.

(m) Presence of Infectious Disease.—An epidemic of Diphtheria was prevalent during the months of February, March, April, May, and June. Fourteen cases of Europeans were reported during these months; the mortality rate was fortunately low. Sporadic cases of Enteric Fever only were discovered during the half-year. As far as I was able to ascertain, the former infection was brought into the town from the district, and I believe the country people were infected simultaneously in outlying portions of this district bordering on Tarkstad and Maraisburg, so I think one is justified in inferring that the origin of the epidemic was traceable to the two last mentioned districts.

No Small-pox was discovered during the half-year. No public vaccination was performed in the town or district.

#### (ii) SUB-DISTRICT OF MARAISBURG.

DR. N. POLLOCK, ADDITIONAL DISTRICT SURGEON.

(a) There have been no changes made in the water-supply to the town during the half-year.

(b) The surface drainage has been improved by the making and extending of furrows on each side of the streets.

(c) The Municipality undertake the duty of removing slop-water, night-soil, and all household refuse, but as the sanitary cart at present in use causes a bad, though temporary nuisance, it would be desirable to use some form of covered cart for the removal of night-soil.

(d) I do not know of any cases of overcrowding in this town.

(e) There is one bakery in the town, which is fairly well-kept. There are two butcheries, in one of which I found the meat kept in a room which is, or was, recently used for a workshop, and which I found at the time of my inspection not over clean as such. I also found a large quantity of skins within a few feet of where the meat was hung. In the other butchery, the meat is kept in a small room about 7 by 10 feet, and it would be a misnomer to call this room either clean or tidy. The fact is, there is no effectual inspection of such premises by the Municipality.

(f) There are no cases, as far as I am aware, of food being stored, kept for sale, or prepared with insanitary surroundings.

(g) Horses and cattle are kept in stables or in enclosed yards. I do not know of any swine being kept in the town.

(h) The Native Location is under the control of the Municipality, and it would be difficult to imagine anything more insanitary than its surrounding veld.



This matter has been reported upon *ad nauseum*, but there is no improvement—rather the reverse.

It is absolutely necessary and the duty of the Municipality to provide two latrines for the location, and to appoint a Headman, or have a native constable appointed who should see that any regulations made by the Municipality are observed.

(i) The cemetery has been well enclosed by an iron railing, the work having been undertaken by the Municipality.

(k) There is an urgent need of having latrines placed outside the town for the use of natives, as there is generally only one w.c. on premises, and householders naturally object to them being used by native servants.

The Municipality once went so far as to supply such latrines, but there the matter has remained.

(l) There is a small shed belonging to the Municipality where Small-pox cases have been treated.

(m) The district has been very free from epidemic or contagious disease. Two cases of Typhoid and one case of Diphtheria, also one case of Leprosy, were brought to the notice of the Board of Health during the last six months.

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## 22. EAST LONDON.

### (i) EAST LONDON.

DR. J. BARCROFT ANDERSON, DISTRICT SURGEON.

In former years, with the assistance of the birth and death returns, the enumeration of the houses, and estimates given by the Field-cornets and Inspectors of Native Locations, and the Cambridge Village Management Board, I made estimates of the population. That made in my last annual report, under date of 24th February, 1904, was “nearly 20,000 whites and nearly 30,000 blacks.” The figures of the official census taken on the 17th of April following were 19,793 whites and 29,928 others; results which were practically the same as my estimates. And since my estimates were considered too high by the local public, I think I may accept them in those years when there was no census as being approximately correct, and so use them for purposes of comparison. It will be noticed from my former reports, that my estimate of the total of each race for each of the four years is almost the same. The reason is that in 1901 a militia regiment and many Johannesburg refugees were resident here, and subsequently when the Johannesburg refugees left there was an influx of the refugees from the northern districts of the Orange River Colony, which accounts for the unchanged total of Europeans in a growing town.

Amongst the coloured or native population the net increase by births for the past four years was under 1,000, a figure which probably represents the reduction in the number of Indians since the enactment of the Immigration Act, and the permission of the Transvaal refugee Indians resident here, to leave for there. Therefore I consider my old estimates of the coloured population to be approximately correct.

The Deputy Registrar has kindly allowed me to have his books examined to discover the number of registered births and deaths which took place in each year, as distinguished from those registered in each year, and the following figures are the results for the years from 1900:—

Births.			Deaths.	
	Europeans.	Natives.	Europeans.	Natives.
1900.	557	642	383	733
1901.	509	744	305	486
1902.	559	798	251	543
1903.	585	798	236	593
1904.	658	860	230	590
Yearly total estimated from first six months.			Yearly total estimated from first nine months.	

From these figures, and accepting my estimate of the population, it will be seen that the European death-rate has fallen from 1900, when it was 19·15 per cent., in the yearly stages of 15·25 per cent. for 1901, 12·55 per cent. for 1902, 11·8 per cent. for 1903, to 11·5 per cent. for the first nine months of 1904; and at the same time the birth rate has increased from 27·85 per cent. in 1900 to 32·9 per cent. per annum for the first half of this year.

The yearly excess of births over deaths for Europeans has been from 1900—174, 204, 308, 349, and as yet for 1904 at the rate of 420, a steady improvement.

In these figures those for the natives present a great contrast. In 1900 there was an excess of 91 deaths over births, while for the subsequent years the excess of births over deaths was 258, 255, 205, and as yet for 1904 at the rate of 270.

This contrast cannot have been caused by the number of adult males coming to the town for work, for a short time since; the excess of European males over females is 2,880, and of natives 4,252, which is nearly the ratio between the totals of the two races. I think it can only be attributed to their less sanitary homes. Their huts in the country are not excellent, and many in town sleep in sheds unfit for human habitation, whereas the dwellings of the Europeans are, as a whole, very fairly constructed. The following are the approximate figures for the races as indicating their residence in urban and rural areas:—

Urban.		Rural.	
Europeans.	Natives.	Europeans.	Natives.
17,232	12,602	2,466	16,968

I have not the vital statistics for the other districts with a large town population for comparison. But I may point out that after the Cape Division, with a white population of 120,000, this, as regards white population, follows as one of a group of three, consisting of:—Kimberley, total population 60,160, white, 20,400; East London, total population, 49,721, white 19,793; Port Elizabeth, total population 46,832, white 23,892; the next being Ondtshoorn, total population 30,398, white 15,211.

(a) The water-supply for the town still consists: (1) of the overground tank water, the use of which after rain produces a certain number of cases of mild dysentery; and (2) of the rain water of Amalinda dam water-shed, mixed with the Buffalo River water, pumped into it, and filtered through small sand filter beds. This water is available for the East Bank part of the East London Municipality only.

Recently a salt water supply for street watering, drawn from the Buffalo River, has been completed, with satisfactory results.

The water engineer (Mr. Charles Anthony) who was specially appointed to devise a scheme for a permanent, abundant, pure water supply, published his report in April, recommending the Wolf and Gulu Rivers as the source of a permanent supply, and in subsequent supplementary reports, he shows that an initial supply of about 2,000,000 gallons daily could be obtained thence at a maximum capital cost of £300,000, which would if necessary be capable of very great extension at a proportional cost.

The present supply of under 250,000 gallons daily brings in an annual revenue of about £12,000, and it is an intermittent supply, to but a part of the area requiring it, of water which is not above reproach.

I believe that to carry out Mr. Anthony's initial Wolf-Gulu scheme would confer a permanent economic and hygienic advantage of no inconsiderable importance upon this entire district.

(b) The only improvement in sewers to be reported is the periodical flushing of the Buffalo sewer, and the construction of the upper end of the Quigney sewer for carrying storm-water.

(c) The collection and disposal of night-soil, slop-water, and household and other refuse remain as hitherto. The Town Engineer in his last yearly report strongly urges the necessity of a Horsefall Refuse Destructor, with which opinion I entirely concur. The existing destructor has been proved useless.

(d) The dwellings of the Europeans are, as a whole, very fair, and have for some time past been increasing at the rate of about one daily. But most of them are lacking in efficient provision for the exclusion of ground air.

Many sheds used for coloured servants are quite unsuitable, and unfortunately the average Kafir by choice sleeps in a dark and unventilated chamber.

(e) The slaughter-houses, though improved, are still not managed in accordance with the requirements of the bye-laws, I believe they will not be satisfactory



until the Municipality places a skilled European in charge, and itself performs the slaughtering at a fixed tariff. The butcheries, bakeries, and dairies remain much as hitherto.

(f) The sale, storage and preparation of human food are carefully watched by the Municipal Health Department.

(g) The keeping of animals in town remains about the same.

(h) The Location remains about the same, that for the Asiatics being excellent.

(i) There has been no change in the Cemeteries or Burial grounds.

(k) The various Local Authorities take a reasonable interest in the abating of specific minor nuisances.

(l) The hospital accommodation for infectious diseases remains as hitherto—both scanty and primitive.

(m) Enteric Fever continued to be treated in the General Hospital, and Plague and Small-pox in the Municipal Isolation Hospital on the West Bank. Fortunately there were not cases of both these diseases at the same time.

Diphtheria was not treated in hospital during the half-year.

Two Small-pox outbreaks occurred during the half year, both originating in the King William's Town district. The first one was taken charge of by the Government, when it was at once stamped out; the second remained in the hands of the Municipality, and ran on for some time. But little vaccination was done within the half-year. I have invariably been successful with the fresh Government lymph from Graham's Town. Scurvy was prevalent, which I attribute entirely to the lack of fresh vegetables or fresh grain diet. In the gaol it completely subsided upon substituting home-grown mealies for old imported mealies.

#### (ii) SUB-DISTRICT OF MACLEAN TOWN.

DR. T. S. CHAMBERS, ADDITIONAL DISTRICT SURGEON.

I have nothing to add to my report for 1902; the town is completely at a standstill, if anything, a tendency to going back from the indifference of the inhabitants in all matters concerning health or comfort.

(a) The water-supply has been very bad on account of the long continued drought, as the chief supply is collected in tanks, the majority of which have been dry for a long period. A supply had to be got some distance from the town from the bed of a stream that runs when it rains, but is otherwise stagnant. Another source was opened up in the town by a spring of brack water which has been extensively used during the drought, but the ravine from which it derives its source has been used in the past as a cesspool, and it is consequently not an ideal supply.

A good supply could be got by boring in suitable places.

(b) Nil.

(c) Nothing to add to my 1902 report.

(d) The majority of the houses are very indifferent, and overcrowding takes place generally at Nachtmaal.

(e) There are no slaughter-houses; when an animal has to be killed the most convenient place for the occasion is selected. Butcheries and bakeries are fairly clean; there are no dairies, and milk is sold by anyone that happens to be fortunate enough to have a supply.

(f) Satisfactory.

(g) Cattle are kraaled in many instances too near the dwelling-houses.

(h) There is one small native location, which is well situated. The order is good, and it is kept clean and sanitation is fairly good. It is under the control of the Village Management Board.

(i) There are two cemeteries. The one for Europeans has not been looked after as it ought to have been in the past, and it is suggested to bring it under the Cemetery Act. The other for natives has not been enclosed, but I understand there is something being arranged about the matter. There are very few interments.

(k) Nil.

(l) There is no hospital accommodation; the East London hospital is the nearest to the district.

(m) There has been no case of infectious disease, no Enteric Fever, no Diphtheria, or Small-pox.

[G. 35\*—1904.]

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Vaccination has been nil for the half-year, although notices were issued that public vaccination would be performed. The neighbourhood was, however, well vaccinated during 1902.

The health of this district has been exceptionally good, the most serious cases being a few cases of Pneumonia, Bronchitis, Diarrhoea among children, and Pertussis.

### 23. FORT BEAUFORT.

#### (i) FORT BEAUFORT.

DR. W. DUNCAN MILLER, DISTRICT SURGEON.

The general health of the district has been, on the whole, very good during the past half-year, and this is the more noticeable in that the period has been one of severe drought, and consequent scarcity of water. The fact that tubercular diseases, and particularly Pulmonary Tuberculosis, are on the increase, especially among the natives, calls for very serious consideration, inasmuch as this constitutes a growing danger to the public health of Europeans and natives alike. The compulsory notification of these cases is undoubtedly a step in the right direction, but until Local Authorities waken up to a sense of their responsibilities in regard to the public health in this matter, very little can be done towards checking the ravages of this scourge of the human race. The constant overcrowding and lack of ventilation of the native huts are responsible for much of the increase in Phthisis cases which has of late been painfully impressing itself upon the attention of medical practitioners in this district. More careful supervision of native locations, education of both European and native public opinion on the principles of the prevention of tubercular diseases, and some attempt at isolation of Phthisis cases, when notified, are matters which must sooner or later be taken up and dealt with by Local Authorities.

(a) The scheme referred to in the report for 1903 is slowly resolving itself towards realisation. There exists no good reason why the town of Fort Beaufort should not possess a constant unfailing supply of good river water even in time of drought.

(b) and (c) There is nothing further to report under these headings than has been done in former reports.

(d) The dwellings which are systematically overcrowded are undoubtedly the native huts. More thorough supervision in this direction is a desideratum, and probably the framing and promulgating of new regulations.

(e) (f) and (g) Remarks in report for 1903 hold good under these headings.

(i) Cemeteries and Burial Grounds.—The European cemetery is well cared for, but native cemeteries leave much to be desired frequently, in respect of their position in relation to the water-supply, as noted last year.

(k) Abatement of Nuisances Generally.—The town employs a Sanitary Inspector, who carries out his duty in reporting upon nuisances and breaches of sanitary regulations, and occasional prosecutions of offenders result.

(l) No hospital accommodation for the isolation and treatment of infectious diseases exists in the district.

(m) There have been two cases of Diphtheria reported during the half-year in this section of the district, otherwise the district has been very free from epidemic disease.

Vaccination throughout the district was exceptionally thorough last year, but has not yet been undertaken in 1904.

#### (ii) SUB-DISTRICT OF ADELAIDE.

DR. WILLIAM DAVIDSON, ADDITIONAL DISTRICT SURGEON.

(a) Water-supply.—Up to the present there is no water-supply for the village, the inhabitants depending for their water on the rainfall, which is conserved in tanks, and when this fails they have to fall back on the river, which in dry seasons is not fit for human consumption. During the half-year water was scarce, and the river stagnant most of the time, in consequence of which Enteric Fever was prevalent amongst the native population, who depend entirely on the river for



their water-supply. A water scheme which has been long spoken about is now commenced, and by the end of the year should be completed.

(b) Sewerage and Drainage.—No drainage system exists; cesspools receive and conserve excrement and sewerage, and when these cesspools are full they are in most cases filled in and fresh ones made.

(c) Night-soil and slop-water are, in most cases thrown into the cesspools, and household or other refuse is in most cases thrown into a heap in a corner of the yard, and when this accumulates it is then taken out of the village and deposited at a place set apart for the purpose.

(d) There are no dwellings either overcrowded or unfit for human habitation.

(e) The slaughter-houses are out of town, and can in no way affect the health of the place. The bakeries are conducted in a proper manner, and the milk supply comes from the neighbouring farms.

(f) The sale, storage and preparation of human food are conducted in a proper manner.

(g) Very few cattle or swine are now kept in the village and those do not affect the health of the community.

(h) The native location is kept clean and in good order.

(i) The cemeteries are outside the village, and can in no way affect it.

(k) The Local Authority has seen that yards are kept clear of refuse.

(l) There is no hospital accommodation in the district.

(m) There have been no cases of Diphtheria or Small-pox in the district during the past half-year, but during the months of April, May, and June, Enteric Fever was prevalent in the native location, and a few isolated cases also occurred amongst Europeans in the town. The outbreak of Enteric was, no doubt, due to the use of the river water, which at the time was bad. With the exception of Enteric Fever the village and district have been comparatively free from infectious disease during the half-year.

## 24. FRASERBURG.

### (i) FRASERBURG.

DR. P. J. MADER, DISTRICT SURGEON.

(a) As stated in my last report, the dam remained dry for upwards of two years. This suddenly became filled by the rains we had towards the end of January last, when the long and protracted drought from which the district had suffered, broke up. Although most welcome to everyone, and especially to the farmers, it was not without its drawback, for an epidemic of Enteric Fever broke out a few weeks after in the village.

(b) to (l) These are fully reported on in last year's report, and I have at present nothing to add on these matters.

(m) An outbreak of Typhoid Fever occurred in the town, commencing about the middle of February and continuing to the middle of May, during which period twenty-one cases were notified as being affected by the disease. When I reported to the Government on the outbreak in the gaol, I stated as my opinion that I believed the cause of the outbreak to be connected with the water supply, in that the well from which drinking water is obtained by the inhabitants is situated about 50 yards below the dam, and that after a good rainfall, when the dam gets filled, the silt and sediment, consisting largely of sheep and cattle droppings, are stirred up, and the filtration through which this water passes being of a porous limestone, is not sufficient to disinfect it, and by this means the water of the well becomes contaminated. I do not see how at any time when the dam contains water, and strengthens the well, this can be obviated, unless another fountain can be struck either above the dam or on some other part of the commonage not in direct contact with the dam. The Council may perhaps be better able to suggest a scheme of this sort, but I fear that unless this is done we shall be subjected periodically to outbreaks of infectious disease. It is as useless as it is impracticable to advise people to drink nothing but boiled water, which after all is almost the only preventive in a case of this sort. It is too much trouble, and only when sickness threatens a



household will people resort to this plan, out of fear. Under ordinary circumstances, people will not carry this out. Besides this, I may state that only the better class of white inhabitants take the trouble of taking their water from the drinking fountain, the poorer and coloured classes preferring to drink the water out of the furrow that flows down the main street, it being so much easier to obtain. To obviate this latter difficulty, I wish to impress on the Council the necessity of having the water laid down in pipes along the main street, with hydrants at suitable places, according to the scheme suggested by me long ago. For those of the inhabitants who can afford to filter their drinking water in their own homes, I would advise a "Slack and Brownlow seven candle filter" as the best to my knowledge. The cost is about £2 15s. In the same report above referred to, I pointed out to the Government Authorities that the gaol quarters were inadequate for the accommodation of the families of both Gaoler and Turnkey, the former consisting of seven heads, and the latter of six. My suggestion as to having the quarters made into one for the sole use of the Gaoler and his family has been adopted, and a suitable house in the town has been hired for the accommodation of the Turnkey.

In a second report to the Government on the outbreak of Typhoid in the Government quarters, where three cases occurred, I expressed it as my belief that these buildings, like most of the older buildings in the town, were in an insanitary state for the reason that the floors of such buildings are on a level with the streets, and the town being built on a dead level, the natural drainage is insufficient to carry off the stagnant rain water, which after a rain may be seen standing in pools all over the town. The result is that in such houses the floors become damp and mouldy, and emit a foul smelling odour, as there is no ventilation underneath. This must also remain a standing menace to the occurrence of future outbreaks of infectious disease. The outbreak occurred mostly among the white inhabitants of the town, so that it was not necessary for the Council to interfere in cases which could be properly isolated, except in supplying disinfectants gratis, which was done wherever required. It is only when such patients cannot be isolated, and that chiefly among the coloured population, that it would be extremely convenient to have a hospital for infectious diseases. This idea was mooted some years ago, I believe, and correspondence on the matter with the Government was set in motion, but has been allowed to drop on account of the state of war and other matters. I would recommend that the erection of such a hospital be again taken into consideration by the Council.

I may add that the outbreak was not of a very severe nature; in only two or three cases did complications arise, and no deaths occurred.

Eleven paupers received outdoor relief from the Government during the six months. After giving the authorised rations of 24 ounces of mealies, one ounce of fat, and one ounce of salt a fair trial, I found the same quite inadequate to the requirements and sustenance of the class of paupers we have here, who are unable to supplement their rations by any extra earnings. I consequently allowed them 1 lb. of meat extra twice a week, with a little coffee, sugar, and tobacco daily. I give a classification of the paupers to show their class and condition:—

Two old and bedridden, one of whom died.  
Two blind.  
One paralysed—died.  
Three very old and feeble, one died.  
One cripple.  
One cancer of throat.  
One convalescent from Scurvy, after release from gaol.

Public vaccination was performed in the village on 66 persons. The lymph was obtained from Cape Town and yielded very good results. I also vaccinated in the district at five appointed centres. Only 43 persons presented themselves in all, notwithstanding that vaccination had not been performed in the district since 1900; consequently there must be hundreds of persons unvaccinated. This unsatisfactory state of matters is to be accounted for from the total indifference with which the farmers regard compulsory vaccination, because the law in this respect has never been enforced. They refuse to travel even short distances for the purpose of having their children or dependants vaccinated; and some regard it as an interference with their private rights, and even when brought to their very doors, they refuse to avail themselves of the opportunity.

One case of Scurvy broke out in the gaol, and was treated with fresh vegetables and milk. He made a slow recovery, and after being in hospital for over a month, was released from prison by order of His Excellency the Governor.



The following are the deaths registered during the six months:—

	European.	Coloured.	Total.
Tuberculosis ... ..	2	6	8
Apoplexy ... ..	0	1	1
Convulsions... ..	1	2	3
Enteritis ... ..	5	5	10
Bronchitis ... ..	0	1	1
Epilepsy... ..	0	1	1
Cardiac ... ..	3	4	7
Burns ... ..	0	1	1
Marasmus ... ..	0	2	2
Diphtheria ... ..	2	0	2
Pneumonia ... ..	0	1	1
Influenza ... ..	2	0	2
Child Birth ... ..	1	0	1
Lockjaw ... ..	1	0	1
Total ... ..	17	24	41

Of these, seventeen came under medical treatment.

Births registered are:—

European ... ..	43
Coloured ... ..	22
Total ... ..	65

(ii) SUB-DISTRICT OF WILLISTON.

DR. WILLIAM ROGERS, ADDITIONAL DISTRICT SURGEON.

The general health of this sub-district is, on the whole, satisfactory. The prevailing diseases are in the order of their frequency:—

(1) Digestive troubles attributable to the meat and rice diet, and the enormous quantity of coffee imbibed.

(2) Post-partum complications.—These are both frequent and severe, but not at all surprising, considering the truly awful methods some of the inhabitants have of dealing with child birth.

(3) Rheumatism, both Acute and Chronic, attributable to the great nocturnal fall of temperature and the carelessness of the people in not providing against this by extra clothing.

(4) Chest Complaints, due to the same cause. Tuberculosis, contrary to what one would expect in a climate with so small a rainfall, is by no means infrequent.

(a) The water supply of the village is derived from (1) a borehole, which being situated outside and above the village, gives a sufficient supply of excellent, though somewhat hard, water, obtainable at a depth of 32 feet, even in the driest season, and which can in no way be contaminated. Being, however, situated some 400 yards from the village, and the path leading up to it being rocky and difficult, I observe that the water-carriers infinitely prefer (2) an open well, overgrown with vegetable and teeming with animal life, and liable to be contaminated by all sorts of filth, but which has the advantage of being only about half the distance of the bore hole. The water of this open well is intended for horses, washing, irrigation, etc., but nevertheless, on account of its proximity to the village, it is the water used by the majority for domestic purposes.

Water is brought to the village in pails, jars, or in ingeniously constructed barrels, which latter are trundled along.

Some months ago the Municipality decided to apply to the Government for a loan for conveying the water from the wind pump in pipes and storing in a large tank. Having determined upon this, the energy of the Municipality was exhausted, and so far nothing further has resulted. Williston is a place of "lots of time." It took eight years of deliberation before the borehole was sunk and the wind pump erected.

(b) Nil.

(c) There is no organised arrangement for the collection of night-soil, slop-water, and household or other refuse. Each individual acts as seemeth best in his own eyes. Sooner or later, however, most of the refuse finds its way to a "dumping ground" about 300 yards south of the village, where it is left uncovered. A few pits were dug some months ago for the burial of excreta, but after the novelty of their use had worn off, things went on in the old time-honoured way. A walk over

the dumping ground on a warm day is quite sufficient to produce severe gastric derangements.

(d) The dwellings in the location occupied by the coloured element are all overcrowded and all unfit for human habitation. The building material in general favour consists largely of paraffin tins, old sacking, reeds, bushes, etc. Some of the aristocracy among the coloured people build partly with stones or sun-dried bricks, but this is generally regarded as a mark of ostentation, and as such, to be suppressed.

(e) There are no slaughter-houses, bakeries, or dairies. Everyone slaughters and bakes for himself or purchases from a neighbour. Milk is very scarce, and is obtained from the surrounding farms.

(f) Satisfactory.

(g) There are no swine or cattle in the village. The only animals kept are horses, mules, donkeys, dogs (in abundance), fowls, and one meercat. The first four wander freely about the place and constitute a public nuisance.

(h) Most of the coloured people reside in a location where order, cleanliness, and sanitation are totally unknown and not understood. Many of the coloured folk, however, hold land and reside in the village among the whites.

(i) The cemetery is situated some few hundred yards from the village, and cannot be regarded as a source of danger. The burial ground of the white element is fenced in, and on the whole, fairly satisfactory. That of the coloured people, however, is far from being so. The graves are scattered anyhow all over the open veld, and are badly kept.

(k) The greatest nuisance is the sandy condition of the streets, which makes walking extremely tedious. I am informed that at present it would be a matter of too great expense to remedy this. Another nuisance is the custom of the store-keepers of drying fresh raw hides in front of their stores. Nobody, however, seems to mind this, and, moreover, the principal offenders are members of the Municipality. On a windy day, dried excreta from the aforementioned dumping ground is blown all over the village, and is far from pleasant.

(l) Nil.

(m) There was, I understand, a slight epidemic of Diphtheria and one case of Enteric in February and March, but as I only arrived here in May, I am unable to give particulars.

Except in the case of the children of a few of the more enlightened of the population, there has been no vaccination performed in this sub-district for many years. Certainly 99 per cent. of the children under 10 are unvaccinated, and Small-pox, should it break out, will here find a most suitable nidus.

The total number of births for the six months ending June 30th in this sub-district was 25, and the total number of deaths 12.

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## 25. GEORGE.

DR. C. OWEN-SNOW, DISTRICT SURGEON.

(a) The water supply is as described in previous reports. There is no source of human pollution in the water which is laid on in the town.

The open water furrows are not kept clean, and they are an eyesore.

The water supply did not fail during the half-year. The rainfall for the six months was 18.38 inches.

(b) There is no sanitary system in the town.

(c) Tub or pail closets are in almost universal use in the town: each householder has the night-soil from his house buried—weekly or more often—in his plot of ground. This primitive method ought to be changed for a system of removal under Municipal control, especially in view of the fact that many of the inhabitants get their drinking water from the open water furrows in the streets.

The insanitary cess pits which exist in the town ought to be done away with without delay.

Household and other refuse is “dumped” anywhere. It ought, in my opinion, to be dealt with by the Municipal Authorities.

The water furrows at Blanco are in an insanitary condition.

(d) Overcrowding naturally exists amongst the poorer classes, of both races, but not to any very alarming extent.

(e) Slaughter-houses, bakeries, etc., are kept in a fairly satisfactory manner. Cattle are, however, slaughtered at private dwellings.



(f) No butcher's meat has been brought to me for examination during the past six months. Milk, for sale, is, I believe, satisfactorily stored.

(g) Cattle, horses, etc., roam unchecked about the streets. Pigs and ducks disport themselves in the water furrows.

The backyards of houses, cattle kraals, stables, and pigsties are not kept in as clean a condition as they should be. This ought to be remedied.

(h) There are no native locations.

(i) No further remarks.

(k) The abatement of sanitary nuisances is not enforced as it should be.

(l) There is no hospital in the true sense of the word; there is an unfurnished building of six rooms near the gaol, used promiscuously to house syphilitics, lepers, lunatics, and paupers. The want of a small hospital is much felt.

(m) There have been no cases of Small-pox. Enteric Fever, Scarlet Fever, and Diphtheria have increased slightly.

There has been no epidemic of Scurvy or Epidemic Pneumonia. There have been no cases of Plague, or plague-infected rodents.

The lepers, who were segregated in the district have been removed, to the benefit of the district. 557 persons were vaccinated by me in the six months.

It is impossible to give any returns, as a second visit to the rural centres is not allowed, and parents in the urban areas do not trouble to bring their children a second time for inspection.

Fourteen syphilitic paupers were treated by me in the six months.

There were 62 prisoners in the gaol during the six months.

The prison is a model of cleanliness.

## 26. GLEN GREY.

DR. W. S. PARK, DISTRICT SURGEON.

(a) The water supply of Lady Frere for household purposes has been greatly improved by boring operations, which began last January. During the half-year, about ten holes were put down. Except the one in the Market Square, the rest are all on private property. All are yielding good supplies of excellent water. The average depth at which the water was obtained was about 100 feet from the surface. The old water supply almost failed during the prolonged drought, and had it not been for the successful boring operations, no pure water would have been obtainable.

(b) to (l) I have no remarks to make on these matters. They are pretty well in the same state as they were ten years ago.

(m) Eight cases of Enteric Fever were notified to the Rural Local Authority during the six months. Four of these were European and four native. In all the cases the watersupply seemed to be the source of the outbreak. I have no doubt there were many more cases, as I have often been consulted privately about cases of illness among natives which, judging by the symptoms stated, appeared to me to be cases of Enteric.

There were many cases of Diphtheria in the district. It seemed to spread from the eastern to the western portion of the district. I was called upon to investigate only one outbreak. On my arrival I found that eleven cases had died, and two were then ill. These two were undoubtedly suffering from typical Diphtheria, and from the description given me of the symptoms of the eleven, I have no doubt they had also suffered from that disease. More cases and deaths occurred afterwards, but although I asked the Headman of the location to let me know of any further cases, he sent me no reports. Perhaps he knew that the Headmen's regulations only bind him to report contagious diseases among live stock, and not contagious or infectious diseases among human beings. The information about the other cases was given me by a local trader and a native minister some time after the epidemic was over. In various other parts of the district I have heard from traders that Diphtheria had been about, and that many deaths had occurred among native children. I heard of no cases among Europeans, except those I privately attended in an adjoining part of the district of Wodehouse. In all these cases, except one, where I arrived too late, the injection of Anti-Diphtheritic Serum was followed by recovery. With regard to the Serum treatment, the Acting Medical Officer of Health offered to supply Serum for the treatment of Diphtheritic pauper cases in the district, gratis. This offer could not be accepted. No suggestion was offered as to how travelling expenses were to be met. I am certain the friends of the patients would not have paid them, and I do not think it at all likely the Government would, and the Local Authority could not. Besides,



in this large district, with a population of upwards of 60,000, it would have required at least six medical men stationed in different parts of the district to do what was required on the shortest notice.

There were six different outbreaks of Small-pox during the half-year. It is rather significant that with two exceptions, all these outbreaks took place near the Transkeian border. The total number of cases was 39, and two deaths occurred. Of the two outbreaks which did not happen near the Transkei, one was on a private farm near Lady Frere, belonging to a native. The source of infection was traced to all the five cases being in contact when on a visit to a case which I afterwards found out had come from St. Marks. The other outbreak that at Zwartwater—was on the borders of the Queenstown district, near the railway, and on a main footpath used very much by natives going to and returning from work. All the outbreaks were easily suppressed by the measures taken, viz., the separation of the sick with their attendants from the healthy in the same kraal, the quarantining of the kraal, the employment of guards, whose duties were to see that no communication occurred between those who were sick and those who were healthy, to prevent outsiders visiting the kraal, to obtain any goods which the people required from the nearest shop, to accompany those under surveillance when they went for water or firewood, or to attend to their lands, to prevent them mixing with their neighbours, and to see that the boys herding stock kept to the grazing ground set apart for the stock of owners who had Small-pox in their kraals. As it was impossible to keep on both day and night guards, on account of the great expense involved, I also have always given instructions that surprise visits be paid during the night to see that everything is all right. With these and certain other minor instructions we have never failed to subdue an outbreak, and large ones too, within a very reasonable time. Further, I am confident of this, that after we have taken an outbreak in hand, it has never been a source of further infection. Of course, along with these precautions vaccination has been carried out as soon as possible among the healthy in the infected kraal, and among those in the neighbourhood. I venture to state that had similar precautions been taken in the Native Territories, and properly carried out, there would have been far less Small-pox in the country than there has been and is at the present day.

Some months ago the then Acting Medical Officer of Health for the Colony made some suggestions for subduing outbreaks, which I do not think he would have made had he known the local conditions. One was that no one who had been ill from Small-pox, or who had been in contact with a Small-pox patient should leave the "location" until it had been declared free from the disease. Now a "location" in Glen Grey is not a number of huts enclosed by a barbed wire fence, but a large farm sometimes as large as fifty square miles or more. The Headmen were to be given stringent instructions to see that this was to be carried out; but apart from the fact that neither the Government nor the Local Authority can enforce Headmen to obey such instructions, they might be living five or ten miles away from where the outbreak was, and how could they then carry out such instructions? Again it was suggested that surprise visits be paid by the Police. I think the Police—those at present stationed in the district being the Cape Mounted Riflemen—are here for other purposes, and I am very doubtful if they would be allowed to perform such work. Besides what good would it do? They might visit an outbreak once a week, and in the interval the infected ones are communicating freely with their neighbours. After very considerable experience I see no reason to change my opinion that the employment of reliable guards is necessary; and I am always able to get reliable and experienced men.\*

The only vaccination performed was in connection with these outbreaks—the long looked for and much sought for authority to vaccinate the whole district not having come by June 30th; 452 people were vaccinated, I think with much success.

Six cases of Leprosy were certified to. There are still many cases in the district which ought to have been removed long ago.

Only one case of Syphilis was under treatment.

N.B.—With reference to the remarks made by the District Surgeon at the end of his report, anent vaccination, it may be mentioned that authority for a vaccination tour in the rural area of the Glen Grey district was issued from this Office on the 6th August, 1904. (M.O.H. for the Colony.)

\* NOTE.—The following is the letter referred to by the District Surgeon in the above paragraph marked with an asterisk:—



Office of the Medical Officer of Health for the Colony,  
Cape Town, 16th June, 1904.

No. G2/2290/117.

*Glen Grey District: Expenditure on Small-pox Guards.*

Sir,—I have the honour to inform you that in a recent report by Mr. W. T. Brownlee, Resident Magistrate of Butterworth, on the financial position of the District Council and the working of the Location Boards in the district of Glen Grey, that Officer reports as follows:—

“During the years 1895-1897 and 1900-1903, the sum of £3,611 has been spent on wages to Small-pox guards; of this sum four-fifths is recovered from Government, which leaves a sum of £725 spent by the Council in seven years under this head.

“In the matter of suppression of Small-pox, the Council spends approximately the sum of £100 per annum in wages to Small-pox guards. I consider this to be an utterly useless form of expenditure, and one that should be done away with. I think that it has long been conceded that these guards are utterly useless, and in the Transkei they are no longer employed.”

I shall be glad if you will furnish me with your views in regard to this matter, with the object of reducing the future expenditure under this head to a minimum, if not to altogether abolish it. Personally, I believe that, except perhaps under special circumstances, and when absolutely trustworthy guards can be obtained, Small-pox guards are of very little use. It should always be borne in mind that the essential measure in preventing the spread of Small-pox is the thorough vaccination, first of all persons in the infected kraal or location, and then of the population in the vicinity. In addition, free use should, of course, be made of yellow flags, and stringent instructions should be issued to the Headman to see that no person suffering from Small-pox and no person who has recently been exposed to infection leaves the infected kraal or location until it has been declared free from infection, measures being taken to ensure that these instructions are carried out and enforced, as by occasional surprise visits by Police.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) J. A. MITCHELL,

Acting Medical Officer of Health for the Colony.

The Resident Magistrate,  
Glen Grey.

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27. GORDONIA.

DR. EDWARD H. PHILLIPS, DISTRICT SURGEON.

There is little to add to my last report *re* the health and sanitation of this District.

The same sanitary defects exist now as they have done in the past, despite my having drawn attention to them, and suggested steps for their removal yearly, in my Health Reports, as well as in special reports written from time to time on these matters.

I regret to have to report that matters concerning the erection of a Contagious Diseases Hospital have again come to a standstill as they did in 1897, when the idea of building such a hospital was first mooted.

All the remarks I have made in my last two Health Reports on the subject of Contagious Diseases hold good to-day. It is next to impossible for the District Surgeon, resident in Upington, to check the spread of these diseases in the back country, and I reiterate my opinion that this cannot be done: (1) without the appointment of an Additional District Surgeon at Rietfontein, and (2) without the erection of a lock hospital in this village.

The drought broke early in the year, and was soon followed by a marked decrease in the number of paupers on the roll; the numbers reading on June 30:—Males 15, females 15, as against males 41, and females 60 on January 1st.

Regarding the matters specified under the headings (a) to (l) I have nothing new to report, and beg to refer to my last reports of 1902 and 1903.



(m) There have been no epidemics of infectious disease during the past six months; a few cases of Diphtheria have been reported, two cases of which died, owing to want of proper nursing and to procrastination in seeking medical aid.

One case of Enteric Fever occurred at the Police Camp, and, despite a protracted illness and some complications, made a good recovery.

The District Surgeon has undertaken four journeys in his official capacity, during the last six months, two of especial length and difficulty, viz.:—(1) Into the Kalahari Desert, 400 miles, undertaken when the heat and drought were at their worst, and (2) to Circuit Court at Victoria West, 600 miles.

There have been 91 births and 99 deaths during the half-year.

Causes of death, as taken from the Death Register, as follows:—Marasmus, 5; Diarrhœa, 12; Pneumonia, 8; Malarial Fever, 9; Starvation, 5; Inflammation of Bowels, 7; Consumption, 6; Pyæmia, 1; Convulsions, 10; Manslaughter, 1; Diphtheria, 2; River Fever, 5; Old Age, 7; Bronchitis, 6; Childbed, 2; Still-born, 3; Dropsy, 3; Metritis, 1; Unknown, 4; Bright's Disease, 1; Whooping Cough, 1.

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## 28. GRAAFF-REINET.

(i) GRAAFF-REINET.

DR. H. C. HUDSON, DISTRICT SURGEON.

(a) The water supply is pure in its origin in the Sunday's River, about two miles from town, and is brought down in a large cement pipe to the entrance of the town, where it is allowed to run into open furrows, receiving animal and vegetable impurities in its course, until it reaches brandt-dams or reservoirs, where it is stored, the inhabitants obtaining their supply from the furrows or reservoirs as best they can. As pure water has been brought to the entrance of the town and a reservoir and other waterworks constructed at very considerable outlay, all that is needed to give the inhabitants a pure water supply is the employment of pipes; but of this necessary arrangement being made there appears to be no prospect at present.

The pollution of the water occurs in its transit in the open furrows and in the brandt-dams. These could with advantage be cleaned out more frequently than is at present the case.

(b) There is no system of sewerage or drainage; the furrows on each side of the streets are, as a rule, equal to coping with the storm water.

(c) The Disposal of Night-soil.—The system in vogue is the cesspool system. In the public institutions and in some crowded localities the bucket system is used. The members of the Town Council seem loth to introduce the latter system universally, although they have been told frequently by experts that it would mean a much lower death rate.

Slop-water is disposed of in several ways. A few houses have pits sunk as a rule within a few yards of the dwelling and under-ground water tank—the trap and ventilating pipe being invariably absent. Some people use the cesspools for the purpose; others have it thrown out in the yards, or if there is no yard the street is used, and I have even heard—on good authority—of a case in which a chamber containing human excreta, etc., was emptied into a furrow conveying drinking water.

Household and other refuse is removed weekly by the Municipal carts to a suitable place outside the town. No check, however, seems to be placed on people depositing stable litter, etc., on the roadside near the entrances to the town.

(d) Overcrowding exists with few exceptions in the hire-rooms in town and in the houses and huts in the location. A great deal could be done to prevent this by night inspections and by punishing the culprits. I think further that more attention should be paid to ventilation; I have often been called to see a patient in Hare Street or the location at night, and found the room to be very much overcrowded, the doors and windows tightly closed, and the air holes, if any, filled up with rags.

(e) The slaughter-houses are placed some distance from town, from which they are separated by the Sunday's River. They are owned by the Municipality, which has framed rules for their management. They are in a filthy state. There is a well in the grounds which apparently gives an ample supply of water. The floors are cleansed by loosening the dry blood by scraping with a spade, and then sweeping it



out. In answer to my question as to why the floors were not kept clean by frequent flushing with water, one of the men in charge told me that it was impracticable, as the floors became so muddy and slippery!

The dairies and bakehouses are under no direct supervision. As far as is known they are owned by respectable people, and I have heard of no complaints against any of them. Milk, however also comes from the location and Hare Street, a double row of hire-rooms and the filthiest part of the town—being hawked about and sold by the bottleful. When it is remembered that adulteration is often practised, most probably with impure water, the danger may be readily inferred.

(f) Meat is supplied by butcher's cart and is sold at the Cold Storage and meat shops. Bread is also delivered by cart and is sold at the bakeries and small shops.

(g) Cattle, swine, and other animals are kept in the yards of several properties, and are under the supervision of the Municipality. In wet weather these become a nuisance.

(h) The location is situated to the north-east of the town on a natural incline, and is well drained. It has increased in size very much the last three years.

The chief causes of disease are overcrowding, with badly-ventilated houses, impure water supply, and, except in the case of the new Municipal hire-rooms, there is no arrangement for the removal of night-soil. The death rate in coloured children is appalling, and is chiefly due to acute intestinal catarrh.

(i) The burial grounds in the town and outside are kept in good order. They are not in too near proximity to dwellings. There is surface drainage, which is well looked after. The cemeteries belong to their respective churches, which have regulations in force as regards the granting of authority for and the manner of carrying out burials.

(k) The dust storms in summer are very trying, especially to those suffering from chest troubles, as well as being a means of spreading infection. The effects would, however, to a considerable degree, be mitigated by watering the streets frequently: at present a small water cart, entirely inadequate for the purpose, is used occasionally.

(l) There is a lazaretto a mile-and-a-half from town for the treatment of Small-pox. This is owned by the Municipality.

(m) A report on the infectious diseases occurring during the half-year is given by the Medical Officer of Health for Graaff Reinet.

There was very little vaccination done in town during the half-year, and none in the country.

#### (ii) SUB-DISTRICT OF NEW BETHESDA.

DR. P. A. HOOLE, ADDITIONAL DISTRICT SURGEON.

The health of this village, considering the intense drought from which we have suffered, has been on the whole exceptionally good. Few cases of either infectious or contagious diseases have come under my notice.

Whooping Cough, in a mild form, scarcely requiring medical attention, has been rather prevalent.

Three cases of Pneumonia have been successfully treated.

Only two cases of Syphilis have come under my notice, but whilst progressing favourably, the patients abruptly left the village.

With the exception of a few slight ailments, the health of the lock-up keeper and prisoners has been satisfactory.

The gaol is kept in a good sanitary condition.

(a) Our water supply, even though the continuous drought being unfailing and remarkably pure, will appreciably account for the general good health of the village.

(b) We have in reality no sewerage or drainage system.

(c) Cess pits are in universal use, a more satisfactory state of affairs than formerly, and night-soil, slop water, etc., are deposited therein. I may remark that, with few exceptions, well-water is not used for drinking purposes, except by a few of the inhabitants favourably situated.

(d) Overcrowding does not exist, as each individual family has a separate abode.

(e) Our two butcheries are kept in a perfectly satisfactory manner, but I am not entirely satisfied with the place of deposit of the "offal," which fact I brought to the notice of our Municipality, and hope to see remedied.

(f) We have a morning market, where fresh meat and vegetables are disposed of, both wholesome and of first rate quality.



(g) The keeping of swine is prohibited, and I cannot see that the few cows and sheep which are kept in the village have any deleterious effect on the general health, owing to the distance which separates the houses.

(h) On my last visit to the location I found everything in a satisfactory state, no cases of sickness, and cleanliness apparent.

(i) Regarding the cemeteries, they remain in the same state as in my last report.

(k) I consider our Municipality does all in its power to correct any nuisance, which is brought to its notice, and representations made to it by me are generally followed out.

(m) No cases of "Amaas" have occurred, as I have efficiently vaccinated the whole community.

## 29. HANOVER.

DR. JAMES WILSON, DISTRICT SURGEON.

(a) As the prolonged drought has remained practically unbroken, this district continues to suffer very severely. A number of farmers have gone in for water boring, and with varying success.

The water supply of the village continues to diminish. It is derived from a spring within the Municipal area rather more than half-a-mile north-west of the village. The spring is covered by a brick building, and the water is conducted thence by a covered-in furrow to the upper end of the village, where the inhabitants used to get their drinking water, the surplus being led in open furrows through the village, for irrigation purposes. The water, according to the report of a Medical Officer of the Public Health Department, appears to be pure at the spring, but pollution almost certainly occurs in the course of the covered furrow, resulting in most severe outbreaks of Gastro Enteritis and Enteric Fever during the past summer. When this fact was brought home to the Municipal Councillors, they bestirred themselves to get the necessary funds to lay a system of piping from the spring, and throughout the town. A new application was made to the Government for a loan, and we believe the Health Department supported the appeal, but after a regrettable delay of several months, a reply came that the Government was unable to advance the money. Temporary measures were adopted till such time as the piping could be laid down. Dr. Thornton, of the Health Department, advised the building of a cement cistern with a tap on the covered-in furrow at its upper end. His opinion was that polluted material was washed into the furrow off Dassiekop, the base of which is skirted by the furrow. Unfortunately, in these parts a scourge such as we have had of Typhoid is attributed by many of the people—white as well as coloured—as a direct visitation of Providence, and they could not see the sense in trudging an extra half-mile for their drinking water. I accordingly advised the Council to lay a temporary 2-inch pipe from the top end of the furrow down to the usual "skepping" dam. This was done, and drinking water is now obtained from it. The Council have advised boiling of the drinking water ever since the beginning of the outbreak, but very few people have troubled to do so. After the reply from Government, the Council tried to raise the money for the piping privately, and tenders are now being invited for the work.

(b) There is no system of sewerage, and the surface drainage is bad in several places, but the Council is taking the matter up. The roads in the district are in very bad condition generally.

(c) There is a weekly removal of night-soil by contract under the control of the Municipal Council. So far there is no duplicate system of buckets, so cleansing has to be done by night. Dr. Thornton recommended the abolition of all wooden and other insanitary closets, and householders possessing such were ordered by the Council to have proper closets built. About a dozen people who obstinately refused to comply were eventually convicted by the Resident Magistrate, at the instigation of the Council, for contravening the Municipal Sanitary Regulations. The action had a very salutary effect.

A few householders have private slopwater carts. The Council cannot see their way to incur the expense of a public cart. Household refuse is removed by contract weekly. The old dumping ground for refuse has been cleaned up, and a site farther removed from the village is now used.

(d) There is less overcrowding than formerly; a few huts have been condemned as unfit for human habitation.



(e) Slaughtering is now done at the proper shambles outside the village. Butcheries and bakeries are well-kept. Milk is retailed privately. A soda water manufactory was closed during the typhoid outbreak.

(f) The sale, storage, and preparation of human food are apparently satisfactory.

(g) The Council has taken a firmer stand in the enforcement of their regulations regarding the keeping of cattle, etc., within the Municipal area.

(h) The native location is well-kept. The question of providing it with public latrines is now under consideration.

(i) The cemeteries, both European and native, are in bad order, but little can be done to improve matters till rain comes.

(k) There are now no more cess pools in use in the place. The Municipal Council have appointed me Medical Officer of Health at a yearly salary, and also a Sanitary Inspector, and a general inspection is made and report sent in at least once a month. Many minor improvements have in this way been brought about in the place.

(l) There is no hospital for isolation and treatment of infectious diseases. The hut still stands in the commonage where the Council quarantined the diphtheritic native referred to in my previous report. The Contagious Diseases Hospital, next to the gaol, belongs to Government.

(m) Infectious Diseases.—(1) Enteric Fever broke out in the village towards the end of December, and coming as it did after a severe outbreak of Gastro Enteritis, and about a fortnight after our first rain for some months, I put it down to the water supply and looked forward to a good deal of further trouble. During January cases were reported from most parts of the village, and by the end of February the epidemic became general and alarming. The Health Department was thereupon requested by the Council to investigate as to the cause, and Dr. Thornton arrived early in March. After careful examination of the general sanitary condition of the village and special analysis of the water supply, both at the spring and at the covered furrow, he came to the conclusion that the trouble arose from pollution of the drinking water along the course of the furrow. The measures detailed above were then adopted by the Council, but they were too late to stay the epidemic. Directly cases were notified, the Council provided special buckets for the typhoid excreta, and these were emptied and cleansed by special contract. Jeyes' fluid was freely supplied and advice and directions given for the disinfection of bedclothes and all infected materials. A staff of trained nurses whom we got up for private cases were most helpful during their spare time in teaching the poorer people as to the preparation of proper food, disinfection, etc. Proper dieting of coloured cases was impossible. Though some kind residents offered to provide milk gratis for them, one constantly found them taking coffee with bread and meat.

Several farmers contracted the disease in the village and took it to their farms, and two other outbreaks in the district were said to have had their origin in Naauwpoort.

In all, 108 cases were reported: 88 were in the village and 20 in the district. Only 38 coloured cases were notified, so it is more than likely that many of them escaped observation. Five European deaths were recorded and nine native. The epidemic reached its height in March. Many of the later cases evidently caught the trouble from other previous cases in their own homes, and a few patients developed Malaria as the Typhoid symptoms disappeared.

The epidemic has been a rude awakening to our sleepy hollow, but it is to be hoped that it has roused the Council to a higher sense of their responsibilities, and it might serve as a useful object lesson to other communities in the Colony. I had long suspected the covered furrow, and over and over again had urged the Council to have the water analysed periodically, both at the spring and at the "skepping" dam, but such a venerable institution as the covered-in furrow was above all suspicion. I can only express my sincere hope that Government may soon see their way to come to the Council's assistance.

(2) Diphtheria.—Only one case has occurred in the village during the last six months. It was promptly treated with antitoxin and soon recovered. There have, however, been several outbreaks in the district, notably at Van Vredesfontein, Allmanskraal, Taaiboschfontein, and Visserskraal. Three children at Comfytkuil got infected directly from the cases at Van Vredesfontein. In all, 26 European and four coloured people were affected. All were treated with antitoxin, except one coloured child, who died. Two white children, who were treated late with antitoxin, also died. A number of the cases developed post-diphtheritic paralysis. The outbreaks generally did not seem to follow any order or sequence as to locality or date, and I can only conclude that the infection must have been atmospherically borne.



(3) Small-pox.—The quarantine on the five Small-pox patients and three contacts at the Kleinfontein location referred to in my last report as remaining over into the New Year, came to an end on the 16th January, when the people were discharged and their huts destroyed. No further cases occurred. The total cost of the epidemic was £139 12s. 9d., of which sum the Government will pay four-fifths.

No public vaccination has been performed by me during the last six months. The Vaccination Act is a dead letter in these parts.

Vital Statistics.—The total population is 3,821, of whom 1,483 are European, and 2,338 coloured. During the six months January to June, 26 European and 22 coloured births were registered, while 25 deaths occurred among the European, and 68 among the coloured population. There were in all 24 deaths in infants under one year. No less than 28 deaths are recorded from Gastro Enteritis or some kindred complaint, while Enteric Fever is given as the cause in 14 cases. Diseases of the respiratory organs accounted for 28 cases—nine of whom were tubercular. The very high death rate among the coloured population was, in a large measure, induced by the improper dieting of infants and of those suffering from Gastro Enteritis and Enteric Fever.

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### 30. HAY.

#### (i) HAY.

DR. A. C. BENNETT, DISTRICT SURGEON.

The general health of the district for the half-year ended 30th June, 1904, has been, on the whole, fairly good, the most prevalent diseases having been Influenza and Catarrh Ophthalmia. No cases of Small-pox were reported during the half-year, and no persons presented themselves for vaccination. Ten cases have been treated under the Contagious Diseases Act. Nine natives have been on the pauper roll, old age and general infirmity being the principal cause of their receiving relief.

One European female also received relief, and being a chronic invalid and a cripple, was sent to the Old Somerset Hospital on the 30th April, 1904.

(a) The water supply of the town, as I have repeatedly reported, is quite insufficient. The Village Management Board are, however, endeavouring to overcome this serious difficulty. A new well is being sunk in the Market Square. The open furrow by which the water is conveyed to the inhabitants for drinking and irrigation purposes has been cleaned and widened, and I trust to have a more favourable report to make next year.

(b) and (c) With regard to sewerage and drainage, I am unable to report favourably; it is purely a matter for private consideration and arrangement. No steps have been taken by the Local Authorities in this matter. At the lower end of the town, sanitation is, indeed, very far from satisfactory, as mentioned in my previous reports.

(d) New dwelling-houses are from time to time being erected, and no cases of overcrowding have come under my observation.

(e) The licensed butchers of the town, of which there are three, have no slaughter-houses. Slaughter poles are erected on the outskirts of the town; the carcasses are conveyed to the butchers' shops and there cut up and sold; their shops so far as I know are kept fairly clean. There are three bakeries, all of which are clean and well-conducted. There are no dairies under the Act. I am glad to report there has been an improvement under this heading.

(g) Cattle are kraaled during the night on the outskirts of the town. No swine, so far as I am aware, are kept in the town. Horses are usually stabled.

(h) The location has recently had an Inspector appointed by the Village Management Board and is now fairly clean and in good order.

(i) The old cemetery is still in a very neglected condition, and used, I regret to say, as a latrine by a large proportion of the native population. The new cemetery is kept in a most satisfactory condition.

(k) Very little has been done towards the abatement of nuisances, but even in this respect there is a slight improvement.

(l) We have only a Contagious Disease Hospital, which is under Government control. This building has during the last half-year been, to a certain extent, put in repair. A zinc roof in place of the old thatch has been put on, but is still in a far from satisfactory state.



(*m*) Infectious diseases, with the exception of Influenza in a mild form, and a few cases of Whooping Cough, have fortunately not troubled us. No cases of Bubonic Plague, Scurvy, Pneumonia, and diseases of a like nature have come under my observation.

In conclusion, I am glad to be able to report that the authorities appear to be at last endeavouring to arrange better sanitation and a better water supply for the town.

(*ii*) SUB-DISTRICT OF POSTMASBURG.

DR. R. F. HUSTON, ADDITIONAL DISTRICT SURGEON.

(*a*) The source of the water supply is pure, but the mode of delivery causes contamination. The water supply is large in quantity and more than sufficient to meet the demand for all purposes of the village.

The water supply is contaminated during delivery and storage with every kind of filth and sewage matter.

(*b*) The disposal of sewage from the houses is by the dry system, chiefly in buckets. These buckets do not receive proper attention as regards cleanliness, nor are they provided with a sufficient quantity of dry earth for each dejection. The retention of their contents, viz., excreta, in the neighbourhood of the houses is most objectionable and highly dangerous to the health of the community.

(*c*) The collection and disposal of night-soil are by means of buckets (dry system) which are generally deposited out on the veld in close proximity to the village.

(*d*) With some few exceptions, almost all the houses in the village and district that are occupied are overcrowded, generally two and three families occupying each house at the same time.

(*e*) There are no public slaughter-houses or dairies, each house supplying its own wants.

(*f*) The sale and storage of human food is at the local stores or at the farmsteads.

(*g*) Cattle, sheep, goats, and swine are kept in kraals at night and graze on the veld during the day.

(*h*) The order, cleanliness, and general sanitation in the village and surrounding country district of all the locations are very good.

(*i*) Cemeteries and burial-grounds are kept in a good and sanitary condition.

(*k*) There is no abatement of nuisances generally.

(*l*) There is no hospital accommodation in this part of the district for infectious or contagious diseases, all cases of these diseases being isolated (as far as possible); the necessary disinfectants, deodorants, etc., are used in most cases, and in all cases under my personal supervision they were always enforced.

(*m*) There has been no outbreak of Small-pox in this sub-district.

The cause of Enteric Fever is due to the contamination of drinking water with sewage matter and bad sanitary arrangements in the household.

There have been no cases of Scurvy or Bubonic Plague.

Epidemic Pneumonia has been very prevalent in the district, and I attribute this to the sudden atmospheric changes of temperature, together with the habits and occupations of the majority of the inhabitants, coupled with long exposure whilst travelling, thus predisposing them to the disease.

Infectious Diseases.	Situation.	Date of	
		Discovery.	Discharge.
1 Enteric Fever Case. John Coetzee, adult, European ...	Village of Postmasburg	22nd Feb., '04	21st April, '04
3 Scarlet Fever Cases. Behn, Jimmy } Behn, Mary } European children... Behn, Harry }	Postmasburg {	30th April, '04 16th April, '04 21st April, '04	2nd June, '04 2nd June, '04 3rd June, '04
1 Erysipelas case. Scherman, Theodorus, adult, European.	Postmasburg...	22nd June, '04	24th July, '04

The steps taken to suppress the above diseases were complete isolation of the patients; free use of disinfectants throughout the houses, yards, etc.; boiling of all liquids and foodstuffs used for human food throughout each household where the disease occurred; and the thorough disinfection of buckets, etc., used for the collection and disposal of night-soil and all other household refuse. There was no Local Authority during this period, but latterly a Village Management Board has been appointed.

### 31. HERBERT.

DR. GEORGE O'TOOLE, DISTRICT SURGEON.

The general health of the district has been good.

There has been no epidemic of any sort.

During the year I examined two Lepers who have since been sent to Robben Island. There being no Contagious Diseases Hospital in Douglas, there is no place for the isolation of the lepers during their stay in Douglas *en route* to the railway.

The working of the Contagious Diseases Act is practically stopped in this district, there being no hospital or other accommodation for continuous treatment; and the natives are not sufficiently anxious for treatment to repeat the long journeys from the distant locations to the surgery to renew the medicine.

(a) (b) and (c) Same as last year.

(d) There are no overcrowded dwellings.

(e) (f) and (g) Satisfactory.

(h) Good.

(i) Same as last year.

(k) Satisfactory.

(l) and (m) None.

There has been no public vaccination during the half-year.

### 32. HERSCHEL.

DR. PHILIP MILLARD, DISTRICT SURGEON.

The general health of the district during the last six months leaves little to be desired.

(a) The Water-supply.—This is the same as has existed for the last twelve years, viz., a spring in the bed of the spruit. The quality is excellent, and though the quantity is small, yet it appears to be sufficient for our needs.

(b) Sewerage and drainage, nil.

(c) The pail system is in vogue, and the pails, when occasion requires, are emptied by hand labour and the contents buried in the veld.

(d) Nil.

(e) (f) and (g) Satisfactory.

(h) The native locations are under the excellent management of Headmen and Sub-Headmen, who are responsible to European Inspectors of Locations.

(i) There is no public cemetery; at present a small portion of the Residency Reserve has been railed off and used as such, in a more or less private fashion.

(k) Abatement of Nuisances.—Nil.

(l) There is no hospital accommodation in the district for the isolation and treatment of infectious diseases.

(m) There have been one or two scattered cases of typical Enteric Fever reported from different locations, but it never seems to spread. It is possible that infected military blankets from stationary hospitals may be responsible for these.

In March, April, and May three cases of Enteric fever occurred in the Police Camp at Palmietfontein among the European troopers stationed there.

This camp was used during the late war by native police, and had been left in an insanitary condition.

Enteric Fever was prevalent among the natives at that time, and I have no doubt the outbreak was due to direct infection.

The water-supply at that place is above suspicion.

The patients were efficiently isolated and nursed.



One child (European) in the place also developed the disease, but I think it was caught directly from one of the patients.

The condition of the camp was reported to the proper authorities.

There has been no Diphtheria.

There were two outbreaks of Small-pox during the half-year, comprising in all seven coloured persons, all of whom were unvaccinated.

Under the direction of the Magistrate and the Inspector of Locations these infected persons were placed under a guard and isolated. All "contacts" were vaccinated. In neither case did the disease spread.

It was of a mild nature, and there were no deaths.

There has been practically no Scurvy this half-year.

Forty coloured Lepers remained on the Register as being still in the district on June 30th, 1904.

### 33. HOPE TOWN.

#### (i) HOPE TOWN.

DR. J. J. O'REILLY, DISTRICT SURGEON.

(a) The water-supply is very good, as it is taken in pipes from source of origin to a dam. This water is running night and day, and what is used for drinking purposes is caught as it comes from the pipes. The water that flows into the dam is used for irrigating the gardens. The water-supply in the district is from wells worked by windmills.

(b) Nothing is known of sewerage in the town. There is, however, a huge sluiceway at the west end of the town, which acts as a drain in the rainy season. Here all stable manure, old rubbish, etc., are thrown daily, and remain until the storm water carries them off to the Orange River, which is some ten minutes' walk from the town.

(c) The night-soil is carried away twice weekly by the bucket system. It answers very well.

(d) Overcrowding and dwellings unfit for habitation have not been noticed.

(e) The management of slaughter-houses, etc., has not come to my notice, as there is no Medical Officer of Health for the town.

(f) Most of the shops look clean, otherwise I know nothing of their interior, or how they are managed.

(g) No swine are allowed to be kept in the village. Some cattle are kept in the town, but only in times of drought, when they are stall fed, otherwise all cattle are kept in kraals outside the town.

(h) I know nothing officially about the order, cleanliness, or general sanitation of the Native location under the Municipality. I have no orders to inspect it, but from many unofficial visits made there it looks clean and well kept.

(i) Cemeteries and burial grounds are well kept.

(k) Nothing in this line gives any trouble in these parts.

(l) There is no hospital for infectious diseases, although I believe what was formerly used as a hospital is now occupied by the Municipality for the storage of the sanitary buckets, etc.

The Government Contagious Diseases Hospital is small, badly built, and not what such a building should be.

(m) There were no cases of Diphtheria, Enteric Fever, or Small-pox during the half-year.

Two cases of Scarlet Fever were notified in April, the first being in a school girl who came from Caledon, Cape Colony. She was seen by me in the train at Orange River Station and removed to her parents' farm some two hours from the town. Shortly afterwards her younger brother contracted the disease, as, I believe, also did her two younger sisters. It did not spread to any of the neighbouring farms.

No vaccinations were done during the half-year.

Whooping Cough has been very prevalent during the past six months. The characteristic whoop has been absent in some cases, and most marked in others again.



## (ii) SUB-DISTRICT OF STRYDENBURG.

DR. CHARLES A. PHILLIPS, ADDITIONAL DISTRICT SURGEON.

General Remarks.—As I only took over the duties on 12th May, the current report cannot be as full as one would like; but as far as one can gather, the state of things in the town of Strydenburg is the same as previously reported.

The general drought has been very keenly felt by the inhabitants and farmers round, and the condition of the flora is depressing in the extreme, whole plantations of fruit and ornamental trees being quite dead. Fresh vegetables are very hard to obtain, and to the absence of a sufficient supply I attribute a large proportion of the Anæmia and consequent ill-health experienced by a large section of the community here.

I gather that the general health has been uniformly good; an epidemic of Pertussis broke the monotony, and, lasting for over six months, affected members of nearly all the families, with, I believe, some deaths.

The sanitary state of the township admits of vast improvement, but, owing to the inaction (from an improper grasp of the importance of thorough cleanliness) of a section of those in office here, those who would otherwise do good work in this direction are sadly hampered.

(a) The water-supply is from two sources:—(1) Wells; (2) rain.

(1) Wells: There must be close upon one hundred wells, ranging in depth from 20 to 100 feet, according as they are far from or near to the level of the “pan.”

Owing to their numbers, and near proximity to each other, there is a tendency during the drought for one well to rob another of its water, so that more than half the wells are dry. This water, although hard, owing to the presence of salts of lime and magnesium, is fairly potable.

Contamination of the water is rendered easy, as in most cases no adequate mode of covering in the wells is carried out, and predatory cats, fowls, and other animals often meet their fate in the water at the bottom of a well, and, rotting there, spoil the water.

(2) Rain water is collected in tanks, but is at all times so scarce that it is carefully saved and stored for special purposes. I believe that an attempt was set on foot by the Village Management Board some time ago to provide a common source of water-supply by sinking a well at a favourable situation, and so gravitate the supply through pipes to the houses. The well certainly was sunk, after the expenditure of much money, but, the matter has, I understand, since passed into other hands, and the water diverted for private consumption.

Knowing the early records of this township as all do, I refer now to the great Enteric outbreak of some years ago when almost every family was stricken by the disease, and deaths occurred daily all round, it is somewhat surprising to note the apathy as to the state of the source of water-supply.

(b) No sewerage or drainage exists.

(c) Night-soil is collected, for the most part, every week by a contractor, who deposits it on the open veld more than a mile from the town.

The present mode is very disgraceful, and the inhabitants are often considerably annoyed both at the sight, as also the smell, of the cart as it goes on its rounds at a much too early hour. Again, the empty buckets are replaced without any attempt at cleansing or disinfecting.

Slop-water is thrown into the street or yard, there to be either absorbed by the sand or sun.

Household refuse is sometimes deposited with the night-soil, but for the most part it is allowed to float about at the mercy of the wind in the streets or yards.

I believe that an organised attempt has subsequently been made dealing with the matter by carting away, but the better way would be to burn it.

(d) Nothing to report with regard to overcrowded dwellings.

(e) The management of slaughter-houses, etc., is carried on in a sufficiently satisfactory manner.

(f) Nothing to report about the sale, storage or preparation of human food.

(g) No complaints have reached me with regard to the keeping of cattle or swine.

(h) The state of the location leaves much to be desired in every respect. The houses are small and inadequate, while the inhabitants have to walk over half-a-mile for water.

(i) Cemeteries are vested in the Dutch Reformed Church, and are sufficiently well kept.



- (k) Nothing to report further.
- (l) No hospital accommodation for infectious disease exists.
- (m) No Enteric, Diphtheria, or Small-pox has occurred as far as one can gather.

### 34. HUMANSDORP.

DR. J. J. COULTON, DISTRICT SURGEON.

(a) The water-supply for the village is obtained from a good, strong, never-failing spring situated about four miles from and about 150 feet above the village. It is led through an open furrow into the village, and then in open furrows along the streets. There is little chance of it being polluted on its way across the common, and the sluits in the streets are kept as clean as possible. The Municipality are considering a scheme for masoning out the sluits, which will be a great improvement, and I think will render the supply as good as it can be for the size of the place.

(b) Sewage and drainage, nil. Waste water is thrown out on the land behind the houses, which in most cases is used as garden land.

(c) Since the beginning of 1901 a good pail system has been established by the Municipality. This has worked well. The excreta is buried some miles from the village on the common.

(d) No overcrowding has taken place. Any case as it arises is dealt with by the Municipality at once.

(e) No slaughtering is allowed in the village. There is one slaughter-house on the common, which is kept in a good state, but most of the meat sold in the village is killed on the farms just outside the village, and the slaughter-houses are not under the control of the Municipality. Bakeries are kept clean and in good order.

(f) There is nothing objectionable in the sale, preparation and storage of human food, as conducted here.

(g) No more than six head of cattle are allowed to be kept on any one erf in the village, and whenever this number has proved a nuisance the Municipality has compelled its abatement. Very few pigs are kept in the village.

(h) A new location was laid out by the Municipality at a very suitable spot about half a mile below the village, where it cannot become a nuisance. The Municipality do all in their power to get decent houses built in the location, but there are at present too many huts of a construction not fit for any human being to inhabit. Any steps taken to improve the village location are largely hampered by the establishment at the old Mission Station of Kruisfontein, four miles off, of a location of low-class huts under practically no control. This is the more to be regretted as the rest of Kruisfontein is composed of very fairly built and well kept houses inhabited by natives. It seems to me that any place of the size of Kruisfontein should be placed under some form of control.

(i) The cemetery is well kept, and is so situated as to render it impossible that it should ever become a nuisance.

(k) The Municipality look well after the abatement of nuisances, and take prompt action when any nuisance is brought to their notice.

(m) On February 26th I went to see a native at a place called Kleinfontein, on a farm about four and a half hours (twenty-seven miles) from here. It is quite a village, and in a radius of little more than half a mile there are two houses inhabited by European farmers, and at least twenty-five to thirty houses inhabited by natives, but it is under no authority of any sort, the people doing just what they like. I may also state that the river which supplies Hankey with drinking and other water runs through Kleinfontein. I found the native suffering from Typhoid Fever. He had shortly returned from Port Elizabeth, where I think he must have contracted the disease. It spread among both white and coloured people until June, by which time I had seen about thirty cases, but I do not think, as my visits were only once a week or fortnight, that I saw nearly all the cases that occurred.

On June 11th the Magistrate sent me to investigate the matter, when I found two white people and sixteen coloured people suffering from the disease, and was told that there had been eight or nine deaths from it. On my recommendation the Magistrate issued the following regulations.



(1) That no dirty clothes were to be washed in the river, but that water was to be taken from the river and the clothes washed at least twenty yards from the bank.

(2) That every householder must provide himself with a pit for sanitary purposes and bury the excreta, as before there was no convenience of any kind, each going where he liked on the veld or in the cattle kraal. He also caused the police to visit the place regularly, to see that the rules were carried out properly, and by June 30th things had improved greatly.

There were also three cases in Hankey, all of whom were people who had been visiting at Kleinfontein, and had no doubt contracted the disease there.

There were no cases of Small-pox or Diphtheria in the district during the six months.

There were 157 deaths registered, 20 of Europeans and 137 of natives, during the half-year. Of these 40 are registered as due to "Consumption," but as only 10 per cent. of the deaths are certified by a medical man, any statistics based on them would be utterly useless. I may add that of nine inquests held as to the cause of death, medical evidence was called in only two.

There were 297 births registered, 97 of Europeans and 200 of natives; of these 57 were registered as illegitimate. In Hankey 7 out of 27 were so registered, none of them being Europeans.

### 35. JANSENVILLE.

DR. P. J. HENDERSON, DISTRICT SURGEON.

Generally there is little worthy of reporting in this district for the past half-year; after the extreme dry weather of last year we had good rains, and things looked up a bit, but unless the rains last longer than they do now, farmers say things will be in a bad way once more. Looking at the rainfall, however, for the half-year as compared with the average for the last three whole years and whole of last year, one can hardly take such a gloomy view as our agricultural and stock-breeding friends do of the weather. The winter here has been mild, taking it as a whole. Rainfall up to June 30th, 1904, 6.28 inches; during 1903, 6.73 inches; average for the last three years, 9.36 inches.

The number of deaths during the half-year was 67, Convulsions accounting for no less than 13, Pneumonia for 10, Diphtheria 6, Dysentery 5, Bronchitis 5, Phthisis 3, Diarrhoea 3, Gangrene 2, Marasmus 2, Lockjaw 2, after which come a string of very ordinary causes of death, each accounting for one individual, the only one of interest being a case notified as Lymphadenoma complicated with Paraplegia. Many of the notifications were not made by medical men, and are therefore unreliable. Phthisis is not so very common here evidently as in other districts. I notice the two cases of Lockjaw were not seen by medical men, which seems strange.

(a) The water-supply is obtained as before from two sources: (1) Borehole near river, with windmill to force water up to cistern behind Dutch Reformed Church, from whence it can be got fairly often from taps in the main street.

The cistern is too small for its work and the windmill too weak, so that both fail at times to do their duty.

Funds, I believe, or rather need of them, prevent the Town Council from adopting a new water supply of this kind, i.e., with stronger force and a cistern of bigger dimensions and greater altitude. Some persons here are strongly against taxation for water, but I believe the Council are moving slowly in that direction, and the sooner a public meeting is held to back them up, the better.

(2) Rain water collected from housetops.—This is open to contamination from dust and birds, etc., and should, as it is the drinking water, be boiled or at least filtered.

(b) Nil.

(c) The Municipality employ a contractor who goes round the town during the night and early morning with a wagon removing soiled buckets and setting in fresh ones. The cost of this for a householder is 2s. 6d. per month, payable in advance, which entitles him to one bucket per week. The system, so far as I know, works well, but I think householders should use, more than they do, some disinfectant for their buckets, in fact it would be a good thing if the Municipality laid in a stock of some such article and let householders have them at a cheap rate.

I am against the present site of disposal as before said, on account of its proximity to the Sunday's River, but I believe that the nature of the ground round here



prevents digging to any depth in most parts, and that it would be difficult to pick another site. This, however, is not a matter which is likely to affect us, but rather now, or at some future time, the people dwelling on the lower reaches of the Sunday's River. If it is true that the planting of trees with useful barks at sewerage disposal sites is a paying speculation, I think, as the cost would be little, the Council might try the experiment.

To me it seems a great pity that so much rubbish is deposited amongst the trees below the town and on the bank of the river, where at some time an excellently cool promenade might be made.

(d) Some dwellings are not over clean, and I have no doubt that overcrowding exists in the locations and in the town at certain times.

(e) The slaughter-house scheme mentioned last year has fallen through, I fancy, purely from want of funds.

There is one baker here now, and his place is well kept.

It is a question whether milk bottles are carefully washed out with boiled water by all vendors of that wholesome but too often dirty and infected liquid; or whether natives are allowed to use the earth and water mixture, with its usual complement of germs, for that purpose.

(f) The sale, storage, and preparation of human food is satisfactory, so far as I know.

(g) Pigs I notice at large in the town at times; they certainly do not look ornamental in one's yard, but at large they may raise less smell than when confined and some hold that their virtues as scavengers outdo their bad qualities. Personally, I think they would be a nuisance if allowed to run about to any great extent.

(h) There is no water-supply at all at the location. Health and general cleanliness are good. There seem to be a lot of unemployed young natives hanging about at times.

(i) I think the old cemetery is out of place beside the public school; it ought to be done away with.

(k) Pigeons are getting more numerous again on the roofs of our houses.

(l) The wooden framework of our Small-pox Hospital belonging to the Municipality still remains.

(m) In the beginning of the year there was an outbreak of Diphtheria of a fairly virulent nature, which caused six deaths. Most of the cases were outside the dorp. I had not one death where a chance of early injection of the anti-diphtheric serum was afforded me.

One family had nearly all its members down with the disease, excepting the parents, and the only one that died was one treated very late in the course of the disease. The general public here are beginning to recognise the benefits of the serum, and it should be impressed on them that even in a doubtful case its use can do no harm to the sick person.

On several occasions farmers brought in their children into the dorp suffering from this disease, and took a room somewhere in order that a medical man might attend. This seems dangerous, but as the parents could not diagnose the disease and were acting for the best, I do not see how it can be helped. A point came up, I believe, as to whether the Divisional Council or Municipal Council was responsible for the medical man's notification fee in such a case, but I believe it has been settled satisfactorily.

I know of no case that can be traced to the temporary use of a room for such a purpose, which of course was thoroughly disinfected afterwards.

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### 36. KENHARDT.

(i) KENHARDT.

DR. J. R. SINTON, DISTRICT SURGEON.

(a) The water supply remains as before, bad in quality and deficient in quantity. The present village well is constantly polluted by the natives dipping dirty buckets, empty oil cans, etc., into it. The well should be covered in, and a suitable pump erected without delay. Another well should also be sunk near the native camp. Nothing further has been done in connection with the Driekop Water Scheme.

(b) Sewerage and drainage are unknown.

(*e*) The arrangements for the disposal of night-soil, slop-water, and refuse are most primitive and unsatisfactory. The Village Management Board should organise a proper system.

(*d*) None of the ordinary dwelling-houses in the village are overcrowded or unfit for human habitation, but the rooms occupied by the farmers who come to the village from time to time are often dangerously overcrowded.

Many of the huts in the native camp are overcrowded and unfit for human habitation, but the ventilation being so perfect, one does not see such evil results as might be expected.

(*e*) Butcheries and bakeries are kept fairly clean. There are no slaughter-houses or dairies.

(*f*) One butchery is in direct communication with the general living room, which is most undesirable under the particular circumstances. Otherwise there is nothing unsatisfactory.

(*g*) The keeping of cattle, swine, and other animals is satisfactory.

(*h*) The cleanliness and general sanitation of the native camp leave much to be desired. Unlicensed dogs wander about in numbers and foul the place, which is dotted over with heaps of rubbish. The veldt is the general sanitary convenience. A well near the native camp is an urgent necessity.

(*i*) The old cemetery should be enclosed by a wall or barbed wire fence. The native burial ground should also be enclosed, and the enclosing of the new cemetery should be completed. The private burial grounds on the farms should all be enclosed.

(*k*) Much remains to be done. The Village Management Board does not exert itself much in this direction.

(*l*) Nothing to add to last report.

(*m*) The only cases of infectious disease notified for the half-year were two cases of Chicken-pox.

The outbreak of Beriberi at the gaol, which commenced in 1903, is now at an end. There were fifteen cases with three deaths during the first half of this year. The last case died on 20th April, 1904. Forty persons were vaccinated during the half-year; of these six were unsuccessful. Ten Syphilitic paupers were treated and 51 persons received pauper relief.

#### (*ii*) SUB-DISTRICT OF KAKAMAS.

The Assistant Resident Magistrate at Kakamas writes as follows:—

“There is no Additional District Surgeon at this station. Kakamas consists only of the police reserve and a few trading sites, so that no systematic arrangements with regard to sanitation are in existence.

“No infectious diseases have broken out in this sub-district during the half-year, and no vaccination has been performed.”

### 37. KIMBERLEY.

#### (*i*) KIMBERLEY.

DR. W. W. STONEY, DISTRICT SURGEON.

Regarding the general sanitary matters classified in sections (*a*) to (*k*), I have nothing to add to my reports for 1902 and 1903.

(*l*) With regard to the question of hospital accommodation for the isolation and treatment of infectious diseases, the Board of Health have recently rented a small house on the outskirts of the town, in which seven beds have been provided for the treatment of these diseases. The Board have also acquired a large site in the neighbourhood of the lazaretto with a view to erecting larger and more permanent accommodation for the isolation of cases of infectious diseases.

(*m*) The following cases have been notified to the Board of Health during the half-year under consideration.

	Europeans.	Coloured.	Total.
Small-pox... ..	—	—	—
Enteric Fever ... ..	49	47	96
Diphtheria ... ..	8	2	10
Scarlet Fever ... ..	2	...	2
Erysipelas ... ..	6	17	23
Puerperal Fever... ..	1	2	3
Leprosy ... ..	1	4	5



Small-pox.—The district has been free from this disease during the half-year, though it has occurred in other parts of the Colony, in Pietermaritzburg, Bloemfontein, and Bulawayo. As is well known, there is a large native population in Kimberley drawn from all parts of South Africa, and the continued immunity from Small-pox is, I think, in no small measure due to the thoroughness of vaccination carried out here.

Vaccination.—During the half-year, 1,284 persons were vaccinated by me. The lymph was obtained from the Grahamstown Bacteriological Institute, and has given satisfactory results.

Enteric Fever.—There has been an increase in the number of cases of this disease notified, as shewn by the following table.

Year.	Europeans.	Coloured.	Total.
1898 (from February 19) ... ..	67	49	116
1899 ... ..	112	60	172
1900 ... ..	552	164	716
1901 (excluding Refugee Camp) ... ..	84	87	171
1902       "       "       " ... ..	15	5	20
1903 ... ..	59	35	94
1904 (January 1st to June 30th) ...	49	47	96

Diphtheria.—There has also been an increase in this disease, as the following comparative table shews:—

Year.	Europeans.	Coloured.	Total.
1898 (from February 19th) ... ..	21	6	27
1899 ... ..	34	17	51
1900 ... ..	27	5	32
1901 (excluding Refugee Camp) ... ..	16	2	18
1902       "       "       " ... ..	15	5	20
1903 ... ..	7	1	8
1904 (January 1st to June 30th) ... ..	8	2	10

Scarlet Fever.—We have seen but little of this disease during recent years:—

Year.	Europeans.	Coloured.	Total.
1898 (from February 19th) ... ..	28	7	35
1899 ... ..	77	5	82
1900 ... ..	56	9	65
1901 (excluding Refugee Camp) ... ..	25	6	31
1902       "       "       " ... ..	10	1	11
1903 ... ..	12	3	15
1904 (January 1st to June 30th) ... ..	2	—	2

Erysipelas.—In my report for 1903 it was advocated that this disease should be proclaimed a compulsory notifiable one under the 1897 Public Health Act. This was done in April last, and since that date six Europeans and 17 coloured cases have been notified, thus showing that the disease is a fairly prevalent one. Most of the cases are of a severe type.

Contagious Diseases.—The following table shows the number of cases admitted for treatment in the Contagious Diseases Ward of the Kimberley Hospital:—

	Europeans.		Coloured.		Total.
	Male.	Female.	Male.	Female.	
1902 ... ..	27	2	251	75	355
1903 ... ..	19	4	121	55	199
1904 (Jan. 1 to June 30) 25		1	100	30	156

It will thus be seen that there has again been an increase in the number of these cases under treatment.

During the half-year under consideration, a new block for female patients, of burnt brick with granolithic floors has been built by the Hospital Board at a cost of about £2,000, making provision for eight European, sixteen coloured adults, and six children. The accommodation for both males and females is now extensive and comfortable, in fact it is luxurious compared with that provided in the past.

As stated in my last report, these cases, after being certified by the District Surgeon, are entirely under the care and treatment of the House Surgeons at the hospital.

The following are the numbers under treatment in hospital at the commencement and the end of the half-year:—

	Europeans.		Coloured.		Total.
	Male.	Female	Male.	Female.	
January 1st, 1904 ...	8	—	25	4	37
June 30th, 1904 ...	3	—	21	5	29

In addition to the above figures, the following were treated during the half-year in the gaol hospital:—

Europeans.		Coloured.		Total.
Male.	Female	Male.	Female.	
4	—	29	8	41

Plague.—No cases of this disease have occurred. The precautions carried out by the Board of Health consisted of the destruction and bacteriological examination of rats, and during the prevalence of this disease in Johannesburg, the examination of the trains and isolation of those passengers from the Transvaal who were unable to give a satisfactory address, also the special examination of goods arriving from Johannesburg.

Climatic Bubo.—Especially during the last six months, several cases have been observed by almost all the practitioners in town of unilateral non-venereal inguinal buboes, which, for the want of a better name, we have called “Climatic Bubo.”

Bacterological examination of the glands, surgically removed in several cases has failed, as yet, to throw any light on this disease.

Leprosy.—There were five cases certified during the half-year, one European and four natives. I have again to point out the want of any provision for isolation and detention of these cases pending the arrival of the Governor’s warrant for their removal, the consequence being that they frequently cannot be found when the warrant arrives; and this is not surprising, for from the numerous examinations and interrogations necessary before the various certificates can be completed, the patient has made a shrewd guess at the nature of the disease from which he is suffering, and he suspects this means banishment to Robben Island, therefore, I say, it is not surprising that he is not found some two months later at the address where he resided when the certificates were completed. This being the usual occurrence, it is very necessary that some means should be taken to isolate and detain lepers immediately they are certified. The gaol hospital is not the place for this isolation, though during the past half-year two certified lepers who had absconded, were detained there during the past half-year; this is a most reprehensible practice.

Lunacy.—During the half-year, fifteen persons were certified as of unsound mind, classified as follows:—

Europeans.		Coloured.		Total.
Male.	Female	Male.	Female.	
3	1	8	3	15

Of these, eleven were lodged in the gaol hospital. There has been the same difficulty regarding their removal for proper treatment in an asylum. Five of these were detained in gaol for an average period of 55 days, and one case was kept for no less than 111 days before removal. Such treatment as I have pointed out in my last three annual reports is absolutely disgraceful.

There have also been eleven persons (two Europeans and nine natives) detained in the gaol hospital as alleged lunatics, but who proved, after short observation, to be of sound mind, the temporary mental aberration being usually due to excessive drinking of alcohol or smoking of dagga.

#### (ii) SUB-DISTRICT OF WARRENTON.

DR. E. N. DE V. DAWSON, ADDITIONAL DISTRICT SURGEON.

Owing to non-residence during the greater portion of the period under review, only a partial account of the health of the district for the half-year is possible.

(a) The water supply of the village is from wells belonging to private individuals and from the irrigation furrow. Contamination of the latter is prohibited by the regulations of the Village Management Board.

(b) No sewerage or drainage scheme exists.

(c) There is no organised sanitary service. Householders make their own arrangements for the disposal of night-soil and refuse, subject to the regulations and under the general supervision of the Village Board.

(d) There is no overcrowding.



(e) The management of slaughter-houses and butcheries is controlled by the Board. A Sanitary Inspector is appointed for this and other purposes.

(f) Control over the sale, storage, and preparation of human food is vested in the Board.

(g) Nil.

(h) The native locations are clean and well-kept.

(i) and (k) Nil.

(l) No hospital accommodation exists.

(m) Diphtheria.—One case of Diphtheria in a European child in the village was discovered on the 4th June. The source of infection could not be traced. Two other cases in European adults who had been in contact with the above were notified on the 8th and 9th of June. The last case was not discharged at the end of the half-year. No deaths occurred. The patients were isolated in their own homes, and the houses were quarantined, with the result that no further cases occurred.

Erysipelas.—One case of Erysipelas in a European adult was discovered on the 30th June. The symptoms developed on returning from a visit to Kimberley, where infection probably occurred. The patient was isolated, and the house quarantined. The case was still under treatment at the end of the half-year.

No public vaccination was undertaken in the district during the half-year.

Phthisis is prevalent amongst the coloured portion of the community, and Malarial Fever is endemic in the district.

### 38. KING WILLIAM'S TOWN.

#### (i) KING WILLIAM'S TOWN.

DR. HENRY M. CHUTE, DISTRICT SURGEON.

(a) Water-supply.—The rainfall during the six months January to June, 1904, has been 14·08 inches; the number of days on which rain fell was 42. Of these 14 inches 11·70 inches fell in January and February, and for the remaining four months very little has fallen. There has, however, been no lack of water. The scheme of increasing the supply by a line of pipes to the storage dam at Dunbar Lake has proved a great boon, and there is now an ample supply for all town wants, even in times of drought. There is still great need for a system of filtration of the supply. No filter beds or settling tanks are in existence.

The new water scheme is being still further improved by the laying of a line of 10-inch pipes to replace the old 6-inch main.

The Native Locations of Tsolo and Ginsberg are now supplied from the town service, and the people are no longer dependent upon the river and furrow for their supply of drinking water.

(b) Sewerage and Drainage.—The drainage scheme initiated some years ago is still steadily being carried on; most of the streets are now laid with good stone drains and concrete channels, which deal effectively with washing and bath water, and also storm water; the increased water-supply will enable a regular flushing of the drains to be made, and will minimise the evils arising from the only method now available of dealing with slopwater, viz., by pouring it into the open drains. To remove the evil entirely a system of removal of urine and dangerous slops must be instituted.

(c) It is still in my opinion more necessary than ever that a removal system of urine and kitchen slop-water should be undertaken by the Council. The soil around dwelling-houses is constantly and continuously fouled day by day by this method of disposal of these dangerous fluids, and this soil pollution is, I feel convinced, responsible for much of the Enteric Fever and Diarrhœa which is prevalent.

The system of night-soil removal works admirably; it is devoid of nuisance, and the system is well carried out; the plantation of timber trees at the sanitary trenches, where the night-soil is deposited, continues to thrive, and is year by year becoming a more valuable asset.

(d) Overcrowding.—There are many houses in town where natives are allowed to live in communities, and overcrowding undoubtedly exists. By the Census figures of April, 1904, the number of natives living in the town is 1,631. So long as natives are permitted to reside in the town overcrowding cannot be prevented entirely.



Surprise night visits are made from time to time, and prosecutions undertaken.

(e) With regard to slaughter-houses I am pleased to be able to say that the Council have decided during the present year to build a central abattoir, fitted with all recent improvements; tenders are now being called for for their erection. After their institution no slaughtering will be allowed elsewhere.

(h) Locations.—The only change I have to record is the growth and extension of Ginsberg Location, in which the huts are large and roomy and well ventilated, and are each a definite distance apart. The other older locations still exist, but no new huts will be sanctioned, and it is hoped in time the new location will supplant the older ones.

(i) There is one cemetery common to all classes, creeds and colour. It is situated favourably, so that no drainage can affect the river water, and it is admirably managed by a Burial Board.

(k) The abatement of nuisances is dealt with by frequent inspections of the town by a sanitary inspector; prosecutions of flagrant breaches of the bye-laws are often undertaken.

(m) The epidemic of Plague which occurred in 1903 has quite died out, no cases having occurred during the year, and no Plague-stricken rodents have been found.

Enteric Fever—as in most large Colonial towns—is endemic nearly all the year round. The total number of European cases for the period January to June, 1904, was 35, while for the corresponding period of 1903 the number was 39. During the year special attention has been directed to the prevalence of Enteric Fever in the town. I made an analysis of the cases that had occurred during the years 1901, 1902, 1903. From this table it was shown that Enteric Fever occurred most frequently in the low lying portions of the town, where the subsoil soakage was greatest; it rarely happened that many persons were affected in the same house, a circumstance affording strong probability that the water-supply cannot be held responsible. The Gaol enjoys a remarkable freedom from any outbreaks of Enteric Fever, although cases may be frequent in the town. There are very few places in the town, if any, where so many human beings are congregated together day by day, in relatively so small an area, as in the Gaol—yet Enteric Fever is unknown among the prisoners. The water-supply is the same as supplied to the town; there is, however, an entire absence of soil pollution; the drainage is as good as can be, and this I believe to be the secret of the freedom of the inmates of the Gaol from any outbreaks of Enteric. I do not think the town will ever be free from Enteric until the continual pollution of the soil by the present method of disposal of slops is abandoned. As mentioned in my last year's report, during the extensive and thorough disinfecting operations during the Plague epidemic, there was a remarkable diminution of cases of Enteric Fever, which I believe to have been due to the destruction of the micro-organisms in the soil by the strong perchloride of mercury solution used. Wherever practicable disinfection of the soil with this agent is now being carried out in the neighbourhood where Enteric cases occur, and it will also be used in disinfection of gutters and drains. It will be interesting to note if this method will have any influence in diminishing the number of cases.

A rather extensive outbreak of a modified form of Small-pox has occurred at Frankfort, and isolated cases in other parts of the district. Vaccination has been carried out thoroughly, and the outbreak soon died out.

Appended is a Table of the Mortality of all classes during January to June, 1904, with causes of deaths, and tables of cases of infectious diseases.



# TABLE OF MORTALITY OF KING WILLIAM'S TOWN, JANUARY TO JUNE, 1904.

Including Europeans from Town and Hospital. Natives from Town, Hospital, Brownlee Station, Tsolo, Ginsberg, and Bidhli Locations, compiled from Register of Deputy Registrar of Births and Deaths.

	EUROPEAN—TOWN AND HOSPITAL.										NATIVES. TOWN, -Brown- lee Station ; Tsolo and Bidhli Locations. Numbers at different ages.					
	Numbers at Different Ages.										Numbers at different ages.					
	Infancy.	1 to 5.	5 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	Over 70.	Total.	Infancy.	Childhood.	Adults.	Total.	Grand Total.
CLASS I.—DISEASES DUE TO SPECIFIC ORGANISMS.																
SUB-CLASS.— <i>Zymotic Diseases.</i>																
Whooping Cough ...											0	6			6	6
Membranous Croup ...	1	3	1								5	4			4	9
Enteric Fever ...					1						1		5		5	6
Infantine Cholera ...	1	1									2	1			1	3
Diarrhœa ...	1	1							2		4	2			2	6
Dysentery ...								1	2		3	1	1		2	5
Tuberculosis ...											0				0	0
Pulmonary Consumption ...					1	1			1		3		11	11	14	14
Syphilis ...											0	1	1		2	2
Tetanus ...	1										1				0	1
Diabetes ...							1				1				0	1
Beri Beri ...											0		1		1	1
										20					34	54
CLASS II.— <i>Dietetic Diseases and Chronic Poisons.</i>																
Alcoholism ...						1	1				2				0	2
Inanition ...											0	1			1	1
											2				1	3
CLASS III.— <i>Constitutional Diseases.</i>																
Cancer ...									1		1				0	1
											1					1
CLASS IV.— <i>Developmental Defects and Degeneration.</i>																
Premature Births ...	2										2	2			2	4
Congenital Debility ...	2										2	1			1	3
Spina Bifida ...	1										1				0	1
Old Age ...									2		2				0	2
											7				3	10
CLASS V.—LOCAL DISEASES.																
SUB-CLASS 1— <i>Diseases of Nervous System—</i>																
Meningitis ...	1										1				0	1
Convulsions ...											0	1			1	1
Epilepsy ...											0		1		1	1
											1				2	3
SUB-CLASS 3— <i>Diseases of Circulatory System—</i>																
Syncope ...	1										1		1		1	2
Heart Disease ...						1	1				2		4		4	6
											3				5	8
SUB-CLASS 4— <i>Diseases of Respiratory System—</i>																
Pneumonia ...							1	1	1	1	4	1			1	5
Bronchitis ...											0	2	1		3	3
											4				4	8
SUB-CLASS 5— <i>Diseases of Alimentary Canal—</i>																
Gastro Enteritis ...	1	1									2	1	1		2	4
Intestinal Gastritis ...											0		1		1	1
Peritonitis ...											0		2		2	2
											2				5	7
SUB-CLASS 6— <i>Diseases of Liver—</i>																
Cirrhosis of Liver ...									1		1				0	1
											1				1	1
SUB-CLASS 8— <i>Diseases of Urinary System and Organs of Genera- tion—</i>																
Ovarian Tumour ...					1		1				2				0	2
Bright's Disease...											0		1		1	1
Uraemia ...											0		1		1	1
											2				2	4
CLASS 6— <i>Violence—</i>																
Burns ...											0	1			1	1
Drowning ...											0		1		1	1
															2	2
CLASS 7— <i>Undefined—</i>																
											0				0	0
TOTAL ...	12	6	1	4	4	4	2	4	6	43	22	5	31	58	101	101

SUMMARY FOR JANUARY TO JUNE 30TH, 1904.			
During the year—			
Burials in Public Cemetery	}	101	
In Cemeteries of Tsolo, Bidhli's		101	
and Ginsberg Locations		101	
Of these			
	Europeans.	Natives.	
	43	58	
At various ages. Europeans. Natives.			
Infancy 1 & under	12	22	
1 to 5	6	5	
5 to 10	1		
10 to 20	0	31	
20 to 30	4		
30 to 40	4		
40 to 50	4		
50 to 60	2		
60 to 70	4		
Over 70	6		
	43	58	101
Causes of Death.			
Class I—Zymotic Diseases	20	34	54
Class II— Dietetic Diseases & Chronic Poisons	2	1	3
Class III— Constitutional Diseases...	1	0	1
Class IV —Developmental Diseases and De- generation ...	7	3	10
Class V—Local Diseases— Diseases of—			
Nervous System ...	1	2	3
Circulatory System ...	3	5	8
Respiratory „ ...	4	4	8
Alimentary Canal ...	2	5	7
Liver ...	1	0	1
Urinary System ...	2	2	4
Violence ...	0	2	2
	43	58	101
POPULATION.			
European Returns by Cen- sus, April, 1904 ...	5,903		5,903
Natives and Coloured —			
In Town ...	1,631		
In Brownlee, Ridsdel ...	1,234		
Ginsberg and Bidhli's Locations ...	732		
	3,597		
			9,500
DEATH RATE PER 1,000.			
	1904.	1903.	
Europeans ...	14.54	15.66	
Natives ...	56.14	43.42	

## SUMMARY FOR JANUARY TO JUNE 30TH, 1904.

During the year—  
Burials in Public Cemetery  
In Cemeteries of Tsolo, Bidhli's  
and Ginsberg Locations } 101

Of these 101

Europeans. Natives.  
43 58

At various ages. Europeans. Natives.

Infancy 1 & under 12 22

1 to 5 ... 6 } 5

5 to 10 ... 1 }

10 to 20 ... 0 }

20 to 30 ... 4 }

30 to 40 ... 4 }

40 to 50 ... 4 }

50 to 60 ... 2 }

60 to 70 ... 4 }

Over 70 ... 6 }

43 58 101

Causes of Death. Europ. Nat. Tl.

Class I—Zymotic Diseases 20 34 54

Class II—Dietetic Diseases  
& Chronic Poisons 2 1 3

Class III—Constitutional  
Diseases ... 1 0 1

Class IV—Developmental  
Diseases and De-  
generation ... 7 3 10

Class V—Local Diseases—

Diseases of—

Nervous System ... 1 2 3

Circulatory System ... 3 5 8

Respiratory ... 4 4 8

Alimentary Canal ... 2 5 7

Liver ... 1 0 1

Urinary System ... 2 2 4

Violence ... 0 2 2

43 58 101

POPULATION.

European Returns by Cen-  
sus, April, 1904 ... 5,903

5,903

Natives and Coloured—

In Town ... 1,631

In Brownlee, Ridsdel ... 1,234

Ginsberg and Bidhli's  
Locations ... 732

3,597

9,500

DEATH RATE PER 1,000.

1904. 1903.

Europeans ... 14.54 15.66

Natives ... 56.14 43.42

Table of Mortality of King William's Town, January to June, 1904.—Continued.

NO. OF DEATHS PER MONTH.						Jan.	Feb.	March	April.	May.	June.		
Europeans	...	...	...	...	...	11	10	6	1	4	11	43	Total.
Natives	...	...	...	...	...	5	10	11	6	7	19	58	Total.
Total	...	...	...	...	...	16	20	17	7	11	30	101	Total.

Notifications of Infectious Diseases, 1904, Classified into Monthly Periods and Race.

DISEASE.		JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		TOTAL.	
		White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.	White.	Coloured.
Enteric Fever	...	4	1	7	4	6	0	8	3	6	1	4	6	35	15
Chicken Pox	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...
		4	1	7	4	6	0	8	3	6	1	6	6	37	15

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King William's Town,  
July, 1904.

HENRY M. CHUTE, M.R.C.S., L.R.C.P., Ed.  
District Surgeon,  
Med. Officer of Health.

Meteorological Observations, taken by Dr. C. J. EGAN, King William's Town, from January 1st to June 30th, 1904.

Lat. 32° 52' S. Long. 27° 23' E. Height above Sea, 1,314 feet.

1903.					JAN.	FEB.	MAR.	APRIL	MAY.	JUNE.	
BAROMETER.											
Highest	...	...	...	...	28·92	28·92	28·96	29·07	29·02	29·24	
Lowest	...	...	...	...	28·40	28·54	28·54	28·48	28·50	28·60	
THERMOMETER.											
Highest	...	...	...	...	104	96	101	100	94	91	
Lowest	...	...	...	...	52	53	51·5	56	35	29	
Mean	...	...	...	...	69	72	68·4	64	61	53·5	
RANGE IN 24 HOURS.											
Greatest Range	...	...	...	...	46	31	37	43	42	46	
Least Range	...	...	...	...	9	3	7	15	19	19	
Mean Range	...	...	...	...	23·3	23	23·4	30	31	35·5	
RAINFALL.											
Amount in inches	...	...	...	...	6·39	5·31	1·63	0·19	0·31	0·25	Total Rainfall, January to June, 14·01 inches.
Days of Rain	...	...	...	...	12	11	11	2	4	2	Days rain fell, 42.



## (ii) SUB-DISTRICT OF KEISKAMA HOEK.

DR. D. C. McARTHUR, ADDITIONAL DISTRICT SURGEON.

(a) There is little to be added to my remarks of last year, except to note the indiscriminate washing which takes place in the river, about the village. In a low state of the river such as at present the pollution is very apparent, and many of the farmers use a drift below the village to draw water for domestic purposes. I was called upon for a report as to alleged pollution (referred to in report for 1902) of a stream in a similar manner, at St. Matthew's Mission Station, and, finding it was correct, recommended washing in the stream itself be disallowed, but that if water was carried to spots some distance from the banks, no harm would accrue. The Divisional Council was the Local Authority, but I have not heard whether anything has been done in the matter. The bore-holes at the Lock-up and Police Barracks continue to give a satisfactory supply. Nothing has been definitely decided upon by the East London Municipality as to their future water-supply, but they are still considering the scheme in connection with the Cata and Muyamen's Rivers as mentioned in last year's report, and are also examining the capabilities of a tributary of the Keiskama, viz., the Wolf River. During a long period of drought these streams have kept up a remarkably even flow.

(b) to (h) As in last year's report.

(i) I made a special representation as to Barn's Hill Cemetery; it has been the subject of inquiry by the Divisional Council, but with what result I do not know.

(k) Except the foregoing, I know of no instance in which either of the Local Authorities has done anything to abate nuisances, and it really seems of no use to point out defects year after year. The Village Management Board of Keiskama Hoek has given place to a Municipality, and it is to be hoped that health regulations will not only be properly framed, but impartially enforced. Many of the worst nuisances allowed to exist about the village are due undoubtedly to the consideration of private interests before public necessity, otherwise, pointing out these defects year after year, must have led to some abatement, supposing the public good was the primary consideration in village life.

(l) There is no hospital accommodation.

(m) Two isolated cases of Enteric Fever came to my notice, one a European, the other a native catechist at St. Matthew's. Both recovered.

There has been no Small-pox or other epidemics, and the vaccination tour which was commenced the latter part of last year, has been concluded, and shows for the remaining portion of the tour, 1,012 persons vaccinated, of whom 365 were primary. The complete tour gives a total of 2,367 (entirely natives) vaccinations, 683 being primary. The attendance of those under ten years of age was 1,155, but the percentage of infants was remarkably small. The births for 1903 were returned as 439 in a population of 16,000, and I was dealing with the unvaccinated for a period of eighteen months. Twenty-seven per 1,000 can hardly be considered the true birth-rate for this sub-district, but, taking these figures, the infant attendance should have been far greater. I may say that all through the attendance was bad, for sixteen centres were visited, and many of them twice before any attendance was secured. The fault lay with the Headmen (with one or two exceptions) who were not only openly indifferent, but appear to have no control over their people, who evidently ignore instructions given to their Headmen by the Magistrate. The latter was averse to prosecutions, and so the tour ended in more or less of a fiasco, as it has left the infant class mostly unprotected. In this connection, I would here point out that a better system of birth registration amongst natives is essential to enable a proper estimate to be made of the requirements of infant vaccination in any district. Headmen should be in possession of a list of all infants in their locations requiring vaccination, whenever a tour is in progress. This can only be accomplished by a vaccination certificate completing birth registration. One other incident of the tour was the fear that it was Plague inoculation in another form. The lymph supplied was from Graham's Town, and from casual information, and a few inspections, the results appear to be good.

No cases of Leprosy have come to notice.

Two fresh cases of Syphilis have been placed under treatment; others have been notified, but the pauper certificate seems a stumbling block, and so many cases are left unattended. I find that deaths for the half-year are 158 for all classes; only two of these are European in a population of about 750. The native population according to last Census is 16,000, and, with deaths returned at 156, one has a death-rate which is somewhat phenomenal. However, I trust the health of the



district will not be judged by it. Amongst causes of death I find Convulsions 38, Influenza 20, Dysentery and Diarrhœa 29, Fever 13, Consumption 10, Bronchitis Pneumonia, and "Chest Complaint" 26.

Forty-three of the deaths returned were under five years of age. The births registered were Europeans 15, and natives 173. These latter figures are for a population of 16,000. Can they be accepted as a true registration?

(iii) SUB-DISTRICT OF MIDDLEDRIFT.

DR. D. C. McARTHUR, ADDITIONAL DISTRICT SURGEON.

(a) The bore-hole at the Lock-up continues to give a satisfactory supply, but requires a better pump for convenience of working.

(b) to (l) Under these headings there is nothing to add to remarks on previous reports, and no matters in connection with Public Health have been dealt with by me during the last six months.

(m) There has been no Small-pox or other epidemics during this period.

Vaccination.—A general tour amongst the native population was commenced in April. It comprised twenty-six centres to be visited, and up to the present thirteen have been dealt with, giving an attendance of 1,048 persons. Primary vaccinations, 823; re-vaccinations, 225. Under ten years of age, 865; over ten, 183. In three instances a second journey had to be undertaken, as there was no attendance at the first visit. The effect has been, as will be shown in next year's report, a curtailment of the original tour, owing to the extra expense of these fruitless journeys having reduced the amount of the grant available for the later centres. A certain part of the district will, therefore, not be visited for the purposes of vaccination. The total attendance, so far, has been very poor, considering no general vaccination has taken place for two years, and the Census returns for this sub-district show a native population of 24,551. Unfortunately, the birth registration, noted below, is ridiculously small, and is of little use in forming an estimate of infant population unprotected, which is the class one is chiefly concerned with in these vaccination tours. My experience during this tour, leads me to point out that the Headmen, with few exceptions, take not the slightest trouble to obey orders and bring their people forward. In those centres where I had no attendance I found that the Headmen had not warned the people, and, in some instances, were absent at the time of my visit. The Headmen of both sub-districts appear to suffer from the same complaint—indifference to official orders—and I sincerely trust that some remedy will be found for it in the future, if vaccination is to be successfully carried out. I suggested and urged prosecution of defaulters under the Act. At the outset a few were prosecuted, and warned as to penalties. This had a good effect in a particular location, but nothing further has been done, and the native is left with the idea that there is no intention of enforcing the Act.

Fourteen cases of Syphilis in young children were discovered during the vaccination tour, and placed under treatment. The location supplied twelve of the cases, of which three were in one family.

One case of Leprosy has been sent away.

Deaths for the half-year are shown as 136. Amongst causes I find Dysentery and Diarrhœa 30, Bronchitis and Pneumonia 40, Consumption 17, Convulsions 17, Inflammation of Bowels 9, Influenza 7, Child-birth 2.

The births are returned as 168.

These registrations deal with a population according to last Census of 24,551 natives alone.

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39. KNYSNA.

DR. GEORGE MARR, DISTRICT SURGEON.

The health of the town and district has been remarkably good, with the exception of the epidemic to be referred to later.

Under headings (a) to (l) there is nothing fresh to add to my report of last year.

(m) A few sporadic cases of Diphtheria and one case of Scarlet Fever occurred in the town, and were isolated as far as possible. One case of Enteric Fever was imported from the district of Uniondale. In the country three cases of Scarlet Fever were notified, and dealt with by the Divisional Council.



In the Doncama Ward a mysterious epidemic commenced about the beginning of March. Cases seen by myself first in April were regarded as an irregular form of Typhoid Fever. Further observation of the disease, however, convinced me that it was epidemic Cerebro-Spinal Meningitis. The diagnosis was the subject of a prolonged controversy between myself and a fellow practitioner, who regarded the disease as Influenza, with a virulent form of Pneumonia in many of the cases. Reports *ad nauseam*, and specimens from three post-mortem examinations, were forwarded to the Medical Officer of Health, but no final decision was arrived at as to the nature of the disease. Personally, I have no doubt on the subject. Similar epidemics appear to have prevailed in this district in 1895 and in 1889-90.

So far as I am personally aware, the disease was confined to coloured people. I did not see all the cases, and cannot state the exact number; but, including mild and doubtful cases one heard of, there may have been seventy, with fifteen or sixteen deaths. The matter was dealt with by Government, and an isolation hospital was established, and the spread of the disease undoubtedly checked to a considerable extent. Latterly, the virulence of the disease appeared to me to have diminished. Forty-one cases of Syphilis were treated during the half-year, fourteen being indoor.

Fifteen people have been assisted as paupers, but only four of these have been on the list for any length of time.

Two hundred and fifty-seven persons were vaccinated in the country and six in the town. So far as I know, all were successful.

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#### 40. KOMGHA.

DR. A. CARRINGTON SEALE, ACTING DISTRICT SURGEON.

The general health in the district since the 1st January has been good. There has been no outbreak of Enteric Fever, Small-pox or Scarlatina. There was one case of Diphtheria in April. Thorough disinfection was carried out, and the disease did not spread.

(a) The spring which is used by the village, has been cleaned out by the Municipality, and the water is good.

(b) No sewerage or drainage system exists.

(c) The bucket system is not in use in the village.

(d) There is no overcrowding.

(e) The butchery has been removed from old site, and is now situated nearly a mile from the village; a satisfactory step.

(f) and (g) Satisfactory.

(h) There are two native locations, one of which is under the supervision of an Inspector. The other is managed by the Municipality, and is satisfactory.

(i) There is one cemetery, which is in excellent order.

(k) Nil.

(l) The Contagious Diseases Hospital has been closed by Government.

(m) Nil.

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#### 41. KURUMAN.

DR. GEORGE BEARE, DISTRICT SURGEON.

Having reported on the health of the district at the beginning of the year, I have very little more to add.

The health of the district has been good during the past six months, very few cases of Malaria having come under my notice.

(a) The water-supply, which originally was sufficient for the community, is becoming gradually less, owing to the drought which has now lasted for ten years.

(b) There is no system of sewerage or drainage.

(c) The management of night-soil, slopwater, etc., depends altogether on the ideas of the inhabitants.

(d) There are no overcrowded houses, as far as Europeans are concerned, but in the native villages there are many houses, both overcrowded and unfit for human use,

(e) There is only one butchery in Kuruman at present, and it is well managed, from a sanitary point of view.

(f) The sale, storage and preparation of human food are properly managed, and have not hitherto been responsible for any diseases in the district.

(g) Cattle, swine, etc., are kept in open kraals, and have not, to my knowledge, affected the health of the township.

(h) The locations are situated many miles apart, and, though no attention is paid to sanitary matters, no diseases have hitherto been traced to this cause.

(k) Nothing has been done for the abatement of nuisances during the past half-year.

(m) There were no epidemics of infectious diseases during the half-year ended June 30th 1904.

#### 42. LADISMITH.

DR. R. W. WATSON, DISTRICT SURGEON.

(a) The water-supply of the town of Ladismith is pure and abundant. The water is brought from the mountain in an open furrow to a reservoir above the town, and is then carried through the town in pipes. There is very little danger of the water being contaminated, as there are no houses or cultivated lands above the water furrow.

In the country the water is generally bad and salt, and must be polluted from houses, kraals, etc., situated above the furrows, and from the custom of washing clothes, etc., in the rivers and furrows, the water of which is used for drinking purposes by the lower proprietors.

(b) Sewerage and drainage do not exist.

(c) Night-soil is removed from a few houses by a contractor twice a week and emptied on the veld some distance from the town. The rest of the people have no closets and bury their night-soil in the gardens. Slop-water is emptied into the gardens or sluits. Household refuse is carted into the veld. Building refuse and street scrapings are placed in the streets, and in a short time are converted into dust by the traffic, and at times are a great nuisance and a cause of considerable risk to the inhabitants.

(d) Most of the houses occupied by the poor whites are overcrowded, large families living in one room. The natives generally live in small huts, or sleep in tents made out of a few sacks.

(e) Butcheries and bakeries are well conducted. No dairies exist. Slaughtering is now done on the veld.

(f) and (g) Satisfactory.

(h) Natives live mostly in a sort of location a short distance from the town, without sanitation, order, or cleanliness.

(i) There is one burial ground in the town belonging to the Dutch Reformed Church; it is near some houses and is getting filled up. Outside the town there is a burial ground belonging to the Berlin Mission, who have burial grounds at Amalienstein and Zoar.

(k) A burial ground should be set apart for paupers and coloured people, who do not belong to a church, and at Van Wyk's Dorp a burial ground should be set apart, as at present people are buried all over the village. All houses should be provided with closets, and night-soil should be regularly removed. Some of the sluits should be levelled up so that the water could run off, and various stagnant pools in the streets should be filled up.

(l) There is no hospital accommodation.

(m) Nineteen cases of Enteric Fever occurred in the district and five in the town. Most of the cases were confined to Dwar's River. I could not trace any connection to the water-supply, as some cases occurred low down, and then there were cases higher up the river. Two cases in the town were caused by people visiting relations at Dwar's River. There were three deaths.

Diphtheria was more prevalent than last year, sixty-two cases being reported from the district and sixteen in town, with six deaths, and there were many unreported cases. The Eastern side of the district was again free. Cases would occur in the same week in widely scattered parts of the district where no communication could be traced between one outbreak and the other. In some cases a recurrence in the same house took place after a lapse of a year. No steps were taken under any Local Authority towards suppressing the outbreak. I consider much good would be done by thorough disinfection of houses, etc.



Vaccination was again only carried out in a few centres, where 210 people were vaccinated; I believe most were successful. For two successive years no proper vaccination tours have been held, and it is to be hoped this will be rectified next year, as the result would be very serious if an outbreak of Small-pox took place.

Tuberculosis appears to be on the increase in the district, twelve deaths having occurred. There were 165 births and 76 deaths, 31 deaths being in children under one year. There were 12 deaths from Tuberculosis, 6 deaths from Diphtheria, 3 deaths from Enteric Fever.

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#### 43. MAFEKING.

DR. T. W. P. HAYES, DISTRICT SURGEON.

(a) Water-supply.—The water-supply has been considerably improved as to quantity by the opening up of new furrows. These give a more adequate supply, but it cannot yet be said to be sufficient. Complaints have been made from time to time of impurities in the supply as drawn from the tap, but these have generally been explained by necessary cleaning operations by the Water Works Company. The supply appears to be uncontaminated, as witnessed by the absence of water-borne diseases such as Typhoid, Epidemic Diarrhoea, etc.

The Railway Camp supply is as before.

(b) and (c) Sewerage, Drainage, Collection and Disposal of Night-soil.—The pail system, which is in use here is well carried out by the contractor. The night-soil and other refuse is disposed of well outside the town.

(d) Overcrowded Dwellings and Dwellings Unfit for Habitation.—The duty of supervising overcrowded dwellings and dwellings unfit for habitation is well done by the Municipal Authorities. None now exist, either of overcrowded or insanitary dwellings.

(e) Management of Slaughter-houses, Butcheries, Bakeries, etc.—These are all in good sanitary condition, and are carefully watched.

(f) The Sale, etc., of Human Food.—No cases have been brought forward of food unfit for human consumption. All is satisfactory in this respect.

(g) Keeping of Cattle, Swine, and other Animals.—The Municipal Authorities have all animals kept in town under their supervision. The duties of supervising are well done.

(h) The Order, etc., of Native Locations.—The Stadt and location are now in good order. They have greatly improved during recent times in the destruction of some bad dwellings and by the attempts to adopt some regularly planned streets in building new houses.

(i) The cemetery is kept in good order.

(k) Nuisances.—All nuisances are very promptly dealt with by the Municipal Authorities as they arise.

(l) Hospital Accommodation.—A well-built lazaretto exists, but so far it has not been required.

(m) The town has been remarkably free from infectious diseases. Two cases of Enteric have occurred. One was contracted in Bulawayo. The disease did not spread from this case. The other was an isolated case of undoubted Enteric, the origin of which one could not trace. There was a short outbreak of measles in the location, but no deaths followed the disease. Chicken-pox was general through the town, location, and stadt; it did not cause any deaths.

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#### 44. MALMESBURY.

(i) MALMESBURY.

DR. A. G. T. ROUX, DISTRICT SURGEON.

The statement contained in my annual report for 1903 stands as an index, and the annexure attached herewith as a general review of the state of health during the last half-year.

The defects in sanitation, in the removal of sanitary buckets, and the want of them, the lack of careful supervision during removals, insufficient and often contaminated water-supply, no control exercised where locations spring up, these are the main objectionable features, but many more could be named.

In compiling the causes of death I gratefully acknowledge the improvement in the registration of cases of convulsions, which are now properly placed, not to the final symptom, but to the disease which has caused the fatality.

The number of deaths due to Consumption (Tuberculosis), increased as it is, should, I think, be greater, as, judging from the number of deaths reported as having occurred from Pneumonia, I suspect that Pneumonia was an intercurrent complication of Consumption, and where I have had an opportunity of verifying this by a post mortem examination, my opinion has been upheld.

In this connection I would like to be permitted to offer a suggestion. A number of Tubercular cases have come to me—principally Hottentots—who, having had their suspicions of the fell disease verified, have been treated once, and I have never seen them again.

These men are not accustomed to hard work, and having to compete with those who are, they do not naturally command so high a wage as those who can work continuously.

The result is that they cannot pay for medical aid, to which they are also somewhat indifferent, using a decoction of herbs. My suggestion, therefore, is to supply gratis to the poor, medicines to those unable to pay, and by this means they will become registered.

These people I have referred to live in “pondoks” or shelters, and expectorate on the floor, which is not hardened as in the native hut, and thus cause the spread of the disease to healthy subjects with the dust which is easily raised.

I wish to emphasise the fact that during the many years that I have made post mortem examinations in this district, I have had opportunities of judging of the possibilities of recovery from consumption amongst those of ruined descent.

Many cases show only a cicatrix where the fell disease has been, others a caseous mass undergoing petrification, and if some assistance were given early, a much larger percentage of recoveries would likely take place under the influence of our splendid climate, and the infection of healthy individuals would be prevented.

From the annexed table will likewise be noticed several deaths from Meningitis; no post mortems were held to verify the disease as simply Meningitis, or whether it was of a Tubercular nature.

Mumps have been very prevalent, of a severer type than usual.

Typhoid Fever has gradually died out, though a few cases did occur, but it is an endemic disease in this district.

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NUMBER OF DEATHS DURING HALF-YEAR ENDING 30TH JUNE, 1904, WITH  
PARTICULARS IN THE DISTRICT OF MALMESBURY.

			URBAN.				RURAL.				Totals.
			European.		Mixed.		European.		Mixed.		
			Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Total Population	...		2,320	2,073	1,640	1,617	4,890	4,275	6,853	5,960	29,628
Total Deaths...	...		10	9	30	37	30	27	109	76	328
Bronchitis	...	...	0	0	1	1	0	0	2	1	5
Pleurisy	...	...	0	0	0	1	0	0	0	0	1
Pneumonia	...	...	2	0	3	6	2	7	27	15	62
Consumption	...	...	0	1	7	11	4	1	16	21	61
Influenza	...	...	0	0	0	1	0	1	0	0	2
Croup	...	...	0	1	0	0	1	2	2	0	6
Diphtheria	...	...	0	0	0	0	1	0	1	0	2
Measles	...	...	0	0	0	0	0	0	0	1	1
Scarlet Fever	...	...	0	0	0	0	0	0	0	0	0
Puerperal Fever	...	...	0	0	0	0	0	1	0	1	2
Typhoid Fever	...	...	1	0	3	1	4	0	6	7	22
Whooping Cough	...	...	1	0	0	1	0	0	2	0	4
Diarrhoea and Vomiting	...	...	1	1	3	6	3	5	6	5	30
Marasmus	...	...	2	1	2	3	2	1	4	2	17
Convulsions	...	...	0	2	3	0	2	1	9	11	28
Old Age and Debility	...	...	0	0	0	1	0	1	5	5	12
Heart Disease	...	...	0	0	0	0	1	2	4	0	7
Apoplexy	...	...	0	0	0	0	3	1	1	0	5
Dropsy	...	...	0	0	0	0	1	0	2	1	4
Kidney Disease	...	...	0	0	1	1	0	0	1	0	3
Cancer	...	...	0	0	0	0	1	1	1	0	3
Accidental	...	...	1	0	2	1	2	0	4	4	14
Liver Disease	...	...	0	0	0	0	0	0	0	0	0
Meningitis	...	...	0	2	3	0	1	1	2	1	10
Peritonitis	...	...	0	1	0	0	0	1	5	0	7
Erysipelas	...	...	0	0	0	0	0	0	0	0	0
Sundry Causes	...	...	2	0	2	3	2	1	9	1	20
Total Deaths	...		10	9	30	37	30	27	109	76	328

(ii) SUB-DISTRICT OF HOPEFIELD.

DR. H. WHEATLEY HART, ADDITIONAL DISTRICT SURGEON.

The sub-district of Hopefield is a fertile area, and one of the most charmingly healthy and pleasant spots in the Cape Colony. It is bounded on the north by the Berg River, and on the west and south-east by the ocean. A few miles northwards of the Berg River, running practically from east to west, is a glorious range of mountains called the "Piquetberg Range," which in winter frequently remain capped with snow. One of the results of the configuration of the country thus described is that the air possesses a most peculiar softness and freshness, which properties are specially remarkable in the summer months when the south-westerly breeze comes almost daily off the ocean.

The villages in the sub-district consist of the inland village of Hopefield and Vredenburg and the fishing villages of Langbaan, Hoetjes Bay, Paternoster, Stompnose Bay, and Steenberg's Cove; and to these, for practical purposes, although on the Piquetberg side of the river, must be added the village of Loading Place.

The inhabitants of these eight villages at present derive their water-supply largely from rain which is collected in tanks. At one village (Stompnose Bay) the water is actually fetched during the summer months from an adjacent village (Steenberg's Cove), and the water to supply about 300 people is carried

by road a distance of four miles. It is needless to enlarge on the meaning of the deficiency of water thus portrayed. In the village of Hopefield, water has been led in pipes from fountains on the western side of the Zout River to the railway station on the east. This water was for the supply of the railway engines, and for that purpose it is very suitable. It is not, however, potable water, since it contains sulphides and salines, the former of which readily decompose, leaving a solution of sulphuretted hydrogen. Unfortunately, this water has been led in pipes from the railway station to a stand with a tap on the market-square, from whence many of the inhabitants take their water in vessels to their houses.

The real water-supply of the sub-district is the Berg River, from whence pure water in unlimited quantity can be obtained. The water should be led to the village of Hopefield, and from thence all the other seven villages should be supplied by a system of connected pipes.

(b) There is naturally no system of sewerage or drainage either in Hopefield or in any of the other villages of the sub-district.

(c) Regarding the disposal of night-soil in the village of Hopefield, it is still a fact that each householder is under the necessity of making his own arrangements for the disposal of night-soil. Naturally this means that the pails of night-soil are emptied on the nearest piece of veldt to the houses, and thereby a nuisance and a grave menace to health is perpetrated.

It should be mentioned that attached to many of the houses in the village there is no latrine. Consequently the coloured people for the most part, together with many of the whites, adopt the habits of nature and deposit their excreta directly on the veldt. This should be obviated by the establishment of public latrines.

The disposal of slop-water and household and other refuse are matters which are left at present undone by the Village Board; the inmates of the houses throw their slop-water where they please, and refuse generally is got rid of by the householder as best he can.

(d) There are a great many dwellings which are inhabited and which are totally unfit for human habitation. I have lost several patients from inability to remove them from their homes to a hospital. The poor coloured people are the especial sufferers: they pay rent for sheds which oftentimes have huge holes in the walls and roofs.

Many plans are devisable for remedying such a dreadful condition, but a very simple one would consist in compelling every landlord to possess a permit, endorsed on a certificate of fitness and suitability, before letting any building whatever, whether it were to be used as a dwelling or workshop, or for any other purpose; and such permits might be renewable once a year.

Overcrowding of dwellings is very common, but can easily be prevented by enacting that every dwelling must be licensed as to its number of inhabitants. This would not only be a preventive, but it would help people, both white and coloured, to understand that overcrowding at any time either of a house or a room is an abomination.

(e) There is no management of slaughter-houses, butcheries, bakeries, dairies, and other trades affecting health.

(f) There are no regulations regarding the sale, storage, and preparation of human food.

(g) Cattle, swine, and other animals are allowed to be kept close to houses within the precincts of the village.

(h) There is no native location or camp of natives in the sub-district of Hopefield.

(i) There are two cemeteries in Hopefield: one for whites and the other for coloured people. The former is distinctly badly situated since its subsoil drainage percolates through erven on a lower site on which dwellings are erected. The cemetery for the coloured people is perhaps not a nuisance at the present moment, but as more building is in course of time carried on, a question will arise as to the desirability of its being closed.

(k) Hopefield is increasing gradually in size, and doubtless nuisances will become gradually lessened. In common with many other places in South Africa, excessive drinking is the cause of much of the disease and poverty existing, and in addition causes a difficulty in obtaining reliable employees.

The nuisance arising from the curse of drink could be materially abated by the State making such laws that no profit could accrue to anyone by the sale of alcoholic beverages. Coupled with such a Draconian measure it would be advisable to inculcate into everyone the fact that the healthy are always better without the



imbibition of intoxicants; and further, it would be well for all philanthropists to recognise that drink is to a large extent a refuge to which men and women resort who are suffering from ennui, and it is therefore counteracted by the encouragement of sports, pastimes, lectures, and so forth.

(*l*) There is no hospital in the sub-district for the isolation of cases of infectious disease.

(*m*) During the last six months there have been no cases of Small-pox in the sub-district. An outbreak of Enteric Fever occurred at Hoetjes Bay, due to the drinking water becoming by some means infiltrated with typhoid germs: there were fifteen cases of the disease, with three deaths. Regarding Diphtheria, I have seen six cases in various parts of the sub-district, and I have been told of about a score of other cases having occurred; there were three deaths to my knowledge from this source.

Tuberculosis is by no means a rare disease, especially at the coast villages; there are, however, really very few cases proportionately to the encouragement to spread which the disease receives by the uncleanly and drunken habits of the poor, and by the horrible dwellings which they are practically forced to inhabit.

No public vaccination has been carried out during the last six months.

As to Bubonic Plague, there have been no cases. As regards rodents, the sub-district teems with field mice, but rats are, I believe, seldom if ever found.

#### 45. MIDDELBURG.

DR. H. HOLZMANN, DISTRICT SURGEON.

(*a*) The water-supply is still conducted and obtained from the same source as in former years.

A meeting, however, was held on the 29th July, 1904, with regard to a water-supply in pipes in connection with which I beg to enclose a newspaper cutting of the proceedings:—

##### THE WATER SCHEME.

##### THE RIGHT STEP TAKEN.

“There was a crowded attendance at the Town Hall on Friday evening, when a meeting of householders was held to consider proposals with regard to obtaining a supply of pure drinking water for the town, and to take steps thereon.

The chair was taken by Mr. N. F. de Waal, M.L.A., who was supported by Councillors H. Beyleveld, W. C. Turpin, and S. Pretorius.

The notice convening the meeting was read in both English and Dutch by the Town Clerk, Mr. A. S. J. v. d. Walt.

The Chairman suggested having an interpreter so that his speech, explaining the position with regard to the water scheme could be interpreted as he proceeded, and thus save the time of those present. This was agreed to, and Mr. H. J. Pienaar kindly consented to act as interpreter, which duty he successfully performed.

The Chairman then commenced to address the meeting. He reminded his hearers that at a former meeting it had been decided to take steps to discover if water could be found without interfering with the present supply in the furrows. He had promised not to take part in any scheme injurious to water erf holders. Water had been found at a depth of 175 feet, at a spot indicated by a Government engineer, from which 100,000 gallons daily could be secured. Although the engineer was of opinion that this water did not interfere with the present supply to the furrows, others were of opinion that if the borehole were used it might do so in the future. The Committee, including water erf holders, therefore decided to try another spot, which was a few thousand yards away, and could not possibly affect the furrow supply. This spot was indicated by one of the oldest inhabitants, and even more water was obtained than at the former place. The expenses incurred in connection with these two boreholes had not yet been paid, as there was no money to pay with. The total amount so far was £521 11s. 9d.

The statement of this indebtedness evidently came as a surprise to those present, most of whom had not suspected it.

The Chairman went on to assert that the money had been well expended. The water in the first borehole rises to well above the level of the river, and could be turned into the river by a short cutting made at a trifling cost, therefore benefiting the water-supply in the furrows.

Twenty-five years ago the town had a population of only 800 people, all of whom were clean and kept the furrows clean. Times had unfortunately altered, and now that the population had increased to over 6,000 there were some of these who were not clean. As a proof of this he mentioned that dead animals, old meat tins, women's clothes, etc., had been taken out of the public water-supply in the furrows recently when they were being cleaned. Twenty-five years ago he had drunk furrow water, but had ceased to do so for many years now, as he had too much respect for his health.

#### BOARD OF HEALTH.

"Dealing with the matter from the point of view of health, Mr. de Waal called attention to the fact that, if the Municipality failed to do its duty in seeing to the health of the town by not supplying wholesome water, the Colonial Secretary would feel obliged to step in and remove from the Commissioners that part of their duties and nominate a Council, as Board of Health, with power to levy a rate up to as high as 3d. in the £ without consulting the ratepayers. The Municipality, therefore, stood in danger of losing its position, and if the meeting decided in favour of the furrows he (the chairman) would resign his position next morning.

#### THE SOLDIERS.

"After alluding to the moral aspect of the question, the Chairman pointed out the advantages that would accrue from getting the town placed in bounds, among which he called attention to the benefit those growing vegetables on water erven would derive from the presence of military purchasers on the morning market. He also mentioned the loss of money to the trade of the town through the military not being allowed to frequent it. Unless the water scheme was passed, the town would certainly remain out of bounds.

#### THE WATER RATE.

"If they adopted a water scheme they must pay for their water, which was as necessary to them as food, house, or clothing.

He gave details of the two schemes that had been proposed, which, thanks to his courtesy, we have already been enabled to furnish to our readers.

He then strongly advocated the meeting supporting the larger of the two schemes, involving an outlay of £10,000, and a water rate of 1d. in the £, payable by the tenants, the water rate not to be levied until the work was completed, which would be in from six to twelve months' time.

As to the working regulations, with regard to charges for connecting up the water main with private houses and the sale of water for trade purposes, etc., a scheme would be prepared, and another meeting would be called to consider such regulations before they were adopted.

The Chairman, having spoken for about an hour and a half, concluded by explaining that anyone who would be liable as a tenant to pay the proposed water rate would have a right to vote. He then invited those wishing to speak on the subject, or to ask questions, to do so.

Advantage was taken of this opening by several present to speak in support of the larger scheme, and to ask questions on points they had not understood.

#### RESOLUTIONS.

"The meeting then passed the following resolutions:—

1. That a water scheme be adopted. Carried by about 400 votes to 11.
2. Proposed by Mr. S. Pretorius, seconded by Mr. G. N. A. Theunissen, and carried with only one dissident:

That the scheme of the Government engineer for obtaining water from borehole No. 2 and leading it into the town, including over 16 miles of piping, be adopted; that tenders be invited for the carrying out of the scheme; that the Council be empowered to spend £10,000 on the execution of the scheme; that the



Council be also empowered to borrow the said sum under the Act of 1879, on the security of a yearly rate, to be called the water rate, of 1d. in the £, to be levied on occupiers of rateable property; and that the minor regulations in connection with this scheme be submitted to a public meeting at a future date."

(b) No sewerage or drainage scheme has as yet been adopted in Middelburg.

(c) The night-soil and slop-water are removed weekly, as in former years. This removal is quite sufficient during the winter months, but if not removed at least twice a week in the summer time it will form a very serious menace to the public health.

(d) There is nothing to report under this head with regard to overcrowded dwellings; although visits have been made from time to time by the Sanitary Inspector, during the night, there has not been a single notification of any case of overcrowding.

(e) There is nothing fresh to report under this head.

(f) With regard to the sale of meat on the Public Market or in town, a meeting was held by the ratepayers, in order to allow meat to be placed on the market which had been killed outside of the slaughter-houses, and, therefore, without proper supervision or control as to the sanitary conditions under which it was killed.

The farmers and others interested in the sale of this meat persuaded the ratepayers to pass a resolution (which was forwarded to the Government Authorities) to the effect that they should be allowed to put meat on the market which had not been killed in the public slaughter-houses, and without proper supervision. The Government replied and stated that they could not alter this regulation.

(g) There is nothing new to be reported under this head. No contraventions of this regulation have taken place during the half-year.

(h) The sanitary condition of the location still remains very good. It is under the control of a Sanitary Inspector, and the sanitary arrangements with regard to latrines are strictly adhered to.

(i) There is nothing fresh to be reported under this head.

(k) My complaint in last year's report regarding the dust, still holds good. During the last month the dust storms have been simply terrible; some days it has been practically impossible to conduct business. No doubt we have had some strong winds during the period, still the nuisance (dust) could be greatly modified if the Municipality could be persuaded to provide a better class of stone for macadamising the roads, and also to provide water-carts.

(l) There is only one hospital, which is a very small building, and is meant for Contagious Disease or Small-pox patients. Even in the Gaol there is no hospital accommodation. A small hospital is absolutely necessary in connection with this establishment, as under the present circumstances any infectious or contagious disease breaking out would at once become epidemic simply through the lack of a proper place with a separate latrine for isolation. Another complaint in connection with this establishment is that there is no disinfecting apparatus of any description for disinfecting the prisoners' clothes. In connection with the town a small hospital would be a great boon, and in many cases prevent epidemics breaking out, especially during the summer months. During the Enteric season, in cases breaking out in boarding-houses, hotels, etc., isolation is practically impossible.

(m) During the half-year there were seventy-three (73) cases of Enteric and forty-two (42) cases of Diphtheria, and ten (10) deaths from Diphtheria. The precautions taken with regard to Diphtheria were immediate inoculation of all patients and contacts, which was very successful in counteracting and preventing the spread of the disease. Isolation in the majority of the cases was practically impossible, owing to the want of a suitable hospital. The Government should also provide the District Surgeon with a supply of Diphtheria Antitoxin for the treatment of indigent persons and paupers. In one instance, to show the necessity of this allowance, I received orders from the Magistrate to proceed to Schoombie Station, to attend to a pauper family named Goosen; one child had died from Diphtheria previous to my visit, and one was suffering from the disease in an acute stage. I had to inoculate the whole family and parents, eight in all, at my own private expense. I have had several other cases of a similar nature. This is a very important item, as inoculation is absolutely necessary with all patients and contacts to prevent an epidemic.

Vaccination.—This was carried out as usual in the village, and a country tour to the different centres is at present under consideration. I did not deem it necessary to perform this tour before, as during the late Small-pox epidemic thousands of vaccinations were performed, which embraced the town and the whole district.



This epidemic of Small-pox, which lasted for nearly one and a half years, I succeeded in finally stamping out in January of this year.

Bubonic Plague.—A meeting of the Municipality was held, some months ago, in conjunction with the Principal Medical Officer of the Military Authorities and the medical men of the town. Resolutions were passed that in the event of any case of this disease breaking out, immediate steps would be taken with regard to isolation and inoculation of patients and contacts. It was resolved to utilise the Small-pox Hospital for patients. This hospital was empty at the time, and is situated over three miles from the town. It was further resolved to have camps erected near this hospital (but at the same time quite separate from it) for the isolation of contacts.

#### 46. MOLTENO.

DR. W. ARCHER ISAAC, DISTRICT SURGEON.

(a) Since the last report, another bore-hole, 150 feet deep, has been sunk close to the last one. The supply promises to be good and lasting. A reservoir should, however, be made at once, as when the gas engine breaks down, or the wind fails, the town is short of water.

(b) (c) (d) (e) and (f) As before.

(g) (h) and (i) Satisfactory.

(k) The nuisances now take the form of papers, etc., blowing all over the town; at one end of the town every little bush is loaded with its crop of papers.

(l) The hospital accommodation consists of a small nursing home, but, I believe, even the one "free bed" is not in existence now.

(m) Scurvy among the native miners is more or less prevalent.

#### 47. MONTAGU.

DR. C. A. WESSELS, DISTRICT SURGEON.

In submitting my health report for the half-year ending 30th June, 1904, I would call attention to the fact that, owing to the death of Dr. Castles, late District Surgeon, and my not having been appointed till July, statistics *re* vaccination, etc., are not obtainable.

(a) There is a good water-supply for the village. The water is brought to the place in pipes, the intake being high up in the mountains beyond any possible source of contamination, and is of good quality and sufficient quantity for the present wants.

(b) Sewerage does not exist; drainage is natural.

(c) Night-soil is removed every fortnight, in a properly constructed cart, and deposited in pits dug about half a mile from the village.

Household and other refuse is carted away about half a mile outside the town. Slop-water is thrown out at the back door.

(d) In the town there is no overcrowding in any of the houses, but in the location overcrowding exists to a great extent, as many as nine or ten persons occupying a hut of one compartment. There are no houses unfit for human habitation in the town.

(e) Slaughter-houses are situated a little distance outside the village.

Butcheries, bakeries, etc., are satisfactorily managed.

(f) Satisfactory.

(g) Cattle and swine are kept in backyards—a most unsatisfactory system.

(h) The native location is in an exceedingly filthy condition, house-refuse of all kinds (paper, rags, tins, and dung) being deposited all over the ground. There are only three huts that have closets attached.

(i) The burial grounds are in good condition.



(m) There is a somewhat severe epidemic of Diphtheria in progress in the town. There have been in all thirty-four cases up to date, of which seven were fatal. The Local Authority (the Municipality) is doing its best to check the disease. Vaccination was performed at several centres in the district, but I am unable to ascertain with what results.

#### 48. MOSSEL BAY.

DR. C. A. KITCHING, DISTRICT SURGEON.

(a) Water-supply.—This is conveyed, through iron pipes, from Kleinbosch River over a distance of about twenty miles. This river takes its rise from a spur of the Outeniqua Range. The water is pure at source and delivery, and fairly sufficient to meet the needs of the town. There are not any causes likely to lead to pollution at source, during transit, or at delivery.

(b) There is no underground sewerage system, but open stone furrows have been constructed along nearly every street, and this work is still proceeding. These converge on mains which convey their contents to the sea.

(c) Night-soil is dealt with by the tub removal system, a special place on the seashore eastward of the town being set apart for emptying and scouring the receptacles before returning them. Household and other refuse is conveyed away by the Municipal carts and tilted into excavations.

(d) Overcrowding has been rigorously proceeded against by the Municipality's Sanitary Inspector, and does not exist to the same extent as heretofore. The same applies to the question as to dwellings unfit for human habitation.

(e) Slaughter-houses are more than a mile from the town, near the seaside. Butcheries and bakeries are cleanly kept, as well as other trades affecting health.

(f) Sale, Storage, and Preparation of Human Food.—There is nothing worthy of remark under this heading.

(g) Cattle and horses are kept in such a way as not to endanger the health of the community. Swine are not allowed to be kept in the town.

(h) The two locations are maintained in a very satisfactory state of sanitation, regular visits being paid by the Municipal Sanitary Inspector. All houses are numbered, and such as are not fit for human habitation destroyed after due notice has been given.

(i) Cemeteries are eastward of the town near the shore, and are well kept.

(k) Nuisances are not in any degree prominent. A lot of trouble is taken in flushing and scouring the drains.

(l) Hospital Accommodation.—There is only the lazaretto near the Point on the sea beach, which is still reserved by the Plague Administration. None other exists for the isolation and treatment of infectious disease. The above-mentioned lazaretto is under the control of no Local Authority. It might accommodate eight patients.

(m) Enteric Fever, which broke out at the latter end of 1899, has been more or less prevalent up to the end of June, 1904, fluctuating in frequency. In the colder part of last year, May to August, there was a marked decrease, followed later by an increase in number of cases in the warmer weather. January, February, and May furnished the largest number of cases for the half-year, the total being forty-four, with seven deaths.

Of Diphtheria there were three cases, with one death. This has never been epidemic here, but few cases occurring, and those sporadically. There being no means of isolation, in cases where the necessity is greatest, *i.e.*, the poor white or coloured, the risk of a whole household being infected is greater with these, in spite of all possible care taken in the free supply of disinfectants by the Municipality to those in straitened circumstances, and in the provision of specially marked and covered receptacles for infectious cases, and special removal of these.

Small-pox has not visited us during the half-year. The same applies to Plague.

There was one case of Scurvy in the Gaol during the half-year in the person of a Kafir who came in suffering from this disease.

Pneumonia has not assumed the epidemic form here.

Subjoined is the table of cases of and deaths from Enteric Fever and Diphtheria for the half-year. Its situation may be said to be general, not confined to any circumscribed locality. Source of infection is not definitely traceable, but with no means for isolation, and, therefore, no constant supervision, infection can-



not but spread where no guarantee exists for the proper treatment of the sources of disease.

The last case was notified on the last day of June, and there has been a decided lull as regards Enteric Fever in the last three months.

The following table gives particulars of cases of Enteric Fever and Diphtheria which occurred during the half-year:—

Disease.	Age.		Race and Sex.				Number of Cases.	Number of Deaths.	Age.		Race and Sex.			
	Under 10.	Over 10.	European.		Coloured.				Under 10.	Over 10.	European.		Coloured.	
			M.	F.	M.	F.					M.	F.	M.	F.
Enteric Fever	10	34	8	7	17	12	44	7	3	4	...	1	4	2
Diphtheria ...	2	1	...	2	...	1	3	1	...	1	...	...	...	1

#### 49. MURRAYSBURG.

DR. DAVID LEWIS, ACTING DISTRICT SURGEON.

There was an epidemic of Scarlatina here during the months of March, April, May and June.

There were no cases of Small-pox, neither was there any vaccination done.

The number of Syphilitics brought under treatment has increased, and the old Lock Hospital has been repaired and extended so that at present the previous accommodation is trebled.

There was no case of Leprosy.

The number of paupers in receipt of Government relief is on the increase.

The rainfall for the six months, as taken at the Gaol, was 7.47 inches.

The number of births registered during the half-year was:—European: 22; 7 males and 15 females; and coloured: 27; 13 males and 14 females.

The number of deaths registered was 21, being Europeans 11, and coloured 10.

Upon comparing the Census of 1904 with that of 1891 we find that there has been a decrease of 955 persons in the urban and rural population.

During the above period there has been an increase of 97 in the European, and a decrease of 1,052 amongst the coloured population. This decrease in the number of the coloured races is accounted for by their migration during the war to other districts, where food could be more easily procured, and their settling there, and also to the scarcity of labour, amongst the agricultural community, in consequence of the drought.

(a) To previous reports I have only to add that two cases of Typhoid Fever have been notified, in which the probable source of the infection was stated to be the water derived from the river, and distributed to the lower half of the village by means of open furrows.

(b) There is no system of sewerage. There is a V-shaped furrow, with an embankment, to convey the storm water from the native location (which is situated upon the higher ground), beyond each end of the village. In the village the rain water, after washing the streets, runs into the open furrows, conveying with it a large quantity of mud.

(c) The cesspool system is still in vogue, except in a few cases. The smell emanating from these in some cases is very offensive. This system is a source of the contamination of the two public wells, and also of private ones, with sewage which percolates through the porous soil.

Slop-water is disposed of mostly by throwing it into backyards, gardens, or cesspools.



The household refuse is removed by the Municipal cart, once a week, and dumped on the veld outside the village.

(d) As per last report.

(e) There are no abattoirs, and of the four butchers exercising their trade here at present one of them slaughters his cattle on the open veld outside the village, while the others slaughter in their back-yards. Every precaution is taken with regard to the disposal of the blood and offal. I have not heard any complaints of late with regard to the condition of the meat exposed for sale.

There are two bakeries, and these are kept in a satisfactory condition.

A few private persons retail the milk they have in excess of their own requirements, and I have heard no complaints with regard to its quality or purity.

There is one aerated water manufactory here, where only filtered water is utilised, and the place is conducted in a satisfactory manner.

(f) There were two convictions under the "Foods Adulteration Act."

(g) As per last report.

(h) The native location, with 76 inhabited houses, and a population of about 320 persons, is under the control of the Municipal authorities, who employ an Inspector to supervise it.

There are only two privies, one at about a hundred yards from each end of the location. They were erected by the Authorities upon the recommendation of the Resident Magistrate. When we consider the population, their number seems rather limited, and the existing ones could be better kept.

The location is in a tolerably clean condition.

(i) The two cemeteries (*i.e.*, the European and the native) are situated in a favourable position outside the village, and are kept in a good condition.

(k) As per last report.

(l) During an epidemic of Small-pox in Victoria West some years ago an iron structure was erected here by the Municipal Authorities, containing thirteen rooms, but has never been used as a hospital. Being situated between the village and the location, and being in close proximity to the former, it must be stated that the then Authorities have been unfortunate in their selection of the site, considering the object they had in view. Moreover, in the matter of the isolation of Small-pox, Regulation 6 under Section 32 of the "Public Health Act, 1883," requires that "Every hospital erected by a Local Authority, and intended for the accommodation of persons suffering from Small-pox, shall be built at a distance of at least half a mile from the nearest habitation." It is further recommended that if many patients are to be treated together, this distance should be at least a mile.

At present this building is let to two families as a dwelling-house.

(m) There were six cases of Typhoid Fever notified to the Authorities. One of these cases proved fatal, as did another one which was probably notified at the end of last year. Both were Europeans.

In the cases notified the probable source of infection was stated to be the water derived from the river in two, unknown in three, and not stated in one.

Nine cases of Diphtheria were notified, five of which were Europeans. The disease proved fatal in one of the European and in two of the coloured cases. In seven cases the probable source of the infection was stated to be unknown, in one suspected, and in one known.

There were no cases of Small-pox or Amaas.

Twenty-seven cases of Scarlatina were notified, of which none proved fatal. The first case of the outbreak was reported on the third day of March, and the last upon the twelfth day of June. In the first case the probable source of the infection was unknown. All the above cases were Europeans.

There was one case of Scarlatina and Diphtheria notified in an European.

There were two cases of Typho-Malarial, one of slow continued Fever, and four of Dysentery reported, and in all the probable source of infection was not known. These cases were all Europeans, with the exception of one of the cases of Typho-Malarial Fever.

The Municipal Authorities closed the schools on the 17th of June in consequence of the epidemic of Scarlet Fever. This was five days after the last case of the disease was notified. With regard to isolation and disinfection, they did nothing whatever.

Also some provision should be made for the supply of anti-diphtheric serum for use in those cases of Diphtheria where the patients are too poor to pay for it, and where often, for the sake of humanity (as matters stand at present) the surgeon is forced not only to give his labour for nothing, but also to deprive his own pocket by supplying the remedy.

There were no cases of Bubonic Plague, and no precautionary measures are at present adopted with regard to it in this district.



## 50. NAMAQUALAND.

DR. M. W. W. COWAN, DISTRICT SURGEON.

(a) The water in this district is obtained from wells and directly from rainfall. Drinking water is solely obtained from wells.

In the villages special wells are set apart for a supply of drinking water. They are kept under lock and key by some Local Authority. The water is carted from house to house, and supplied to the inhabitants thus. These remarks apply to the white population. The natives chiefly procure their water from impure surface wells. As a consequence Typhoid Fever has been for some years a rare disease among the European population, but is quite endemic among the natives.

Of course sporadic cases of Enteric will always occur among Europeans as long as the disease is common among natives.

(b) and (c) Sewerage, Drainage, Removal of Night-soil, etc.—The soil is sandy, and forms a thin covering only to the subjacent rock. After the heaviest rainfall, therefore, water rapidly drains away.

Excreta is removed in carts nightly. It is then buried at places where it is deemed most unlikely to affect the water-supply.

(d) There is no overcrowding in the sense in which it is seen in large towns.

(e) Butcheries and bakeries are well managed in the district generally. There are no public dairies.

(g) Cattle and other animals do wander about this village, although they are not seen in the mining centres. It is difficult to stop this in an agricultural centre like this, and I do not think that *per se* it constitutes much of a danger to public health.

(h) There are no native locations here properly so-called. Around the villages, and especially in the mining centres, natives indiscriminately build their huts. The chief diseases in these localities are Phthisis and Scurvy. Both diseases are very common, and the mortality from them high, especially in the case of Phthisis. Indeed, I think the bacillus of tubercle must flourish in the soil itself. I have noticed several facts pointing to that conclusion. Syphilis is also common among the native population.

(i) Cemeteries and burial grounds are generally well kept.

(l) There is no hospital for infectious diseases, nor do I think one is required here.

(m) There has been but one case of Diphtheria in the district, at O'okiep.

There have been seven cases of Typhoid reported by medical men, but for every case so reported there are many which are never seen by a doctor at all.

The Field-cornets enter deaths from this cause under any heading that suits their fancy, and very strange are some causes of death as given by them. I regret very much having to report that Small-pox is still in the district. We have had it now one whole year, from June to June. Each village in the district has been attacked, but with varying severity. O'okiep, by far the best vaccinated village, because an urban area, has only had one case.

Nababeep suffered severely at first, but no new case has occurred there for several months now.

Steinkopf at the time I write, and for a month previously, has been free from the disease.

Springbok, another well vaccinated place, only developed three cases. It has been free for several months now.

Concordia, the least well vaccinated place hitherto, was the first place to receive the disease, and has been a centre for it ever since. It is now vaccinated thoroughly, or as thoroughly as is possible under the circumstances of a population constantly travelling from place to place, and I hope the result will soon be freedom from disease.

I should recommend strongly that Concordia be made an urban area for vaccination purposes, and also that a policeman be kept there to help in the detection of cases. The village is one of the largest in the district, if not the largest in the matter of native population—yet it is considered a rural area, and this means that before the District Surgeon can vaccinate there he must apply to the Colonial Office—while if it were an urban area he would vaccinate once a quarter.



## 51. OUDTSHOORN.

## (i) OUDTSHOORN.

DR. GEORGE RUSSELL, DISTRICT SURGEON.

In presenting the report for the half-year ended June, 1904, little can be added to that which was furnished for the year 1903. The general health of the town and district has been very good, and no epidemics have taken place during the last six months. Isolated cases of Diphtheria, Enteric Fever, and Erysipelas have occurred, but these have been few and were of a very mild type.

(a) The water scheme was to have been extended and the intake improved, but, as the Town Council could not obtain the necessary loan, this had to be abandoned.

(b) There is no system of drainage.

(c) The collection and disposal of night-soil slop-water and household refuse has been taken over by the Council, and the system is becoming very complete.

(d) In a town situated as this is, where the crven of the place are common to all colours, there are existing buildings which are not fit for human habitations, yet, if those who occupied these houses would only try to keep them clean and orderly, and disinfect them with material supplied gratis by the Municipality, the whole aspect of the locality would be changed.

(e) The public abattoirs and wash-houses which were to have been erected had also to be abandoned for lack of funds.

(f) Regular periodic inspections of all places where food is stored take place, and the reports of the Inspectors are laid before the Council.

(g) Cattle, swine, and other animals are allowed to be kept in certain sections of the town.

(h) No improvement can be reported at the native location.

(i) The old cemeteries are still being used.

(l) There is no hospital for the treatment or isolation of infectious cases.

(m) There was one case of Small-pox, which was taken over by the Town Council, and treated in tents on the commonage.

The vaccination tour takes place in December, but during the half-year quarterly vaccination visits were made to Dysselsdorp and the Court-house, where in all about 500 were vaccinated. No complaints have been made as regards the success of the vaccine, and there is every reason to believe that the lymph used was good.

The average number of paupers is about twenty-five, and of Syphilitic pauper patients about fifty-five per month.

The general sanitary condition of the district is gradually improving, but the sanitation as well as the water-supply of all schools receiving Government assistance should receive serious attention and consideration. In several instances the water-supply at or near certain schools has been the centre of contagion of such diseases as Enteric Fever.

## (ii) SUB-DISTRICT OF CALITZDORP.

DR. LAURENCE F. McDOWELL, ADDITIONAL DISTRICT SURGEON.

(a) Same as last year.

I think drastic measures should be enforced to prevent all washing of clothes, etc., being done in rivers. There have been eighteen cases of Enteric Fever in this village, and up Nel's River, traceable directly to Enteric-soiled garments having been washed in that river. All the cases occurred below farms where Enteric originally made its appearance.

(b) (c) (d) (e) (f) (g) (h) (i) and (k) Same as last year.

(m) Diphtheria during the half-year has greatly diminished. This also applies to Enteric Fever, except for the cases mentioned above, and three or four cases at Matjesgordvlei.

There have been no cases of Small-pox.

No public vaccination has been ordered in this sub-district since October, 1902.

I consider it should be performed at least once a year.

## 52. PAARL.

## (i) PAARL.

DR. ROBERT WOLFE, ACTING DISTRICT SURGEON.

(a) The water-supply is good in quality, but insufficient in quantity for the whole district.

(b) There is no drainage.

(c) Night-soil is disposed of in deep holes in the gardens and covered in with earth when full. Slop-water is disposed of in the open sluits, and household refuse as the householder can manage best.

(d) Overcrowding is prevalent, especially amongst the coloured population.

(e) The management of slaughter-houses, bakeries and dairies is the same as last year.

(f) The sale, storage, and preparation of human food is fairly satisfactory.

(g) Nothing to add to last year's report.

(h) There are no native locations.

(i) Cemeteries are well kept.

(k) Premises are inspected by a sanitary inspector.

(l) The Municipality has a building for the treatment of infectious diseases.

(m) There was very little infectious disease during the six months; two or three cases of Typhoid occurred, four cases of Diphtheria, and five cases of Small-pox. One case of Small-pox occurred in January at Lower Paarl, and was traceable to the outbreak last year; the patient recovered. Four cases occurred in one family at Lower Paarl in March. No deaths occurred. The total number of vaccinations for the six months was 141. Six Lepers were segregated or treated in the district during the six months, three of whom died; one disappeared, leaving two cases on June 30th, 1904.

Paupers.—There were 13 paupers in receipt of outdoor relief and 12 in the Gaol hospital during the six months.

## (ii) SUB-DISTRICT OF WELLINGTON.

DR. C. D. MALAN, ADDITIONAL DISTRICT SURGEON.

(a) to (l) I have nothing to add to my yearly report for 1903; things are in exactly the same state now as then.

(m) As far as I am aware there have not been any cases of Enteric Fever during the half-year. I had a few cases of Diphtheria in my own practice, with no deaths. There have been no cases of Small-pox.

## 53. PEDDIE.

DR. H. FAYLE, ACTING DISTRICT SURGEON.

(a) The water-supply is almost altogether derived from the roofs, being caught in tanks.

A possible source of pollution of the underground tanks, like wells, is by heavy rain washing the soil in, as many of them are not very well covered. The lowering of buckets into the tanks is not as safe as pumping the water out, and the former is the more common.

However, as there is no waterborne disease endemic, there has been no outbreak traceable to this source.

(b) None.

(c) Buckets are used to a small extent, and are emptied privately at a place on the veld far removed from dwelling-houses.

Cesspits are most commonly used, and, as the soil is very rocky, there is not much percolation.

Slop-water and other household refuse are subjected to atmospheric disintegration outside the dwellings.

(d) Nil.

(e) There is no slaughter-house in the village; the animals are killed in a kraal more than 100 yards from the nearest houses. The refuse is buried.

The shops are kept clean.



- (f) The sale, storage and preparation of human food is well managed.
- (g) Pigs are unpopular, being subject to measles (Trichinosis). The other animals are stalled or kraaled in the evening, and are allowed to run on the veld in the daytime. Horse litter, which is the favourite breeding ground for flies, is occasionally burned.
- (h) Locations are kept clean, and efficiently looked after.
- (i) The cemetery is in good order, and not near dwellings.
- (k) Mice are plentiful wherever there is grain or forage, and would be difficult to destroy, as the houses are mostly old, and the walls burrowed into.
- (l) There is no hospital accommodation.
- (m) The district has been free from Diphtheria, Enteric, and Small-pox and Plague during the half-year.

With regard to the precautionary measures taken to prevent an outbreak of Plague, Inspectors of native locations, Police, and Headmen were under instructions to look out for suspicious cases and report them at once.

There has been no attempt to deal with the destruction of rats and mice generally.

There have been some deaths from Dysentery amongst the natives who also suffered from Measles and Whooping Cough during the winter months.

There have been very few vaccinations (768) during the half-year, owing to the fact that during the outbreak of Small-pox in the preceding half-year, vaccination was very thoroughly carried out.

## 54. PHILIPSTOWN.

### (i) PHILIPSTOWN.

DR. W. H. J. HUTHWAITE, DISTRICT SURGEON.

The general health of the district has been below the standard of the corresponding period of former years, there having been epidemics of Gastro-Enteritis, Pertussis, a small outbreak of Enteric Fever, and a few cases of Diphtheria.

(a) The water-supply at present is in the same unsatisfactory condition as reported in former years. The Municipality, however, after endeavouring unsuccessfully to obtain the services of a Government water-borer within a reasonable time, are negotiating with a private borer, and it is hoped that in a few months a supply of pure water sufficient for the needs of the town will be tapped.

(b) There is no system of sewerage or drainage here.

(c) The collection of night-soil and house refuse is made regularly and disposed of satisfactorily, the bucket system being in vogue. I am glad to say that the Municipality are about to undertake this duty as I advised in my report for last year. Formerly the work was performed by a contractor, who was paid by each householder for each removal. Many of the inhabitants, either from carelessness or a sense of false economy, allow their buckets to remain unemptied for far too long a period. Now a regular service will be instituted by the Municipality, the cost being defrayed from the rates.

A system will also be inaugurated for the removal of slop-water from each house. Carts have been specially constructed with covered iron tanks, which will collect the slop-water four times a week.

(d) There is very little overcrowding in the town. In the location it is more in evidence. I am pleased to be able to record that since writing my last report, wherein I complained of the absence of Municipal building regulations, and, as a consequence, small buildings had recently sprung up quite unfit for habitation, the Municipality has framed a series of regulations for the erection of dwelling-houses and which are now only awaiting official sanction to be put into effect.

(e) The slaughter-house and bake-house are kept in a satisfactory condition.

(h) The native location is in a cleanly condition and in good order. The Municipality have erected two latrines, one each for males and females. I have pointed out that this accommodation is insufficient, and more will now probably be put up. Two latrines have also been erected on a convenient piece of waste ground adjoining the town, for the use of the native servants working in the town.

(m) In the early part of the year we had a severe outbreak of Epidemic Diarrhoea, affecting both adults and children, the latter more severely, and result-



ing in the death of six Europeans and nine coloured persons, all under the age of two years, with the exception of two coloured males whose ages were three and sixty-one years respectively.

Pertussis has been very prevalent during the last six months, and has been the direct cause of death in five cases, three Europeans and two coloured, all children, the ages being, one each of six, three and two years, and two of four months.

Diphtheria.—A slight outbreak occurred in May last in two families; four cases in one, and three in the other, resulting in one death, a child of two years. It was brought into the town by the family in which the four cases occurred, one case being sick at the time having contracted the disease on the farm from a native servant.

Enteric Fever.—This disease has been responsible for five deaths during the last half-year, three Europeans and two natives.

The efforts made towards improving the water-supply and the undertaking of the removal of night-soil and slop-water by the Municipality point to an awakening of the public interest in matters of hygiene. The Municipal Authorities are to be congratulated on having made at last a few advances towards perfecting the sanitation of the town.

(ii) SUB-DISTRICT OF PETRUSVILLE.

DR. ALAN C. McLEAN, ACTING ADDITIONAL DISTRICT SURGEON.

(a) The water-supply is good and sufficient, being obtained from springs lying above the village, so situated at present as to be free from any possibility of contamination, the water being carried through pipes to various points for distribution in the streets of the village.

(b) There is no scheme for sewerage and drainage.

(c) The collection and disposal of night-soil by the bucket system is carried out satisfactorily, but there is some room for improvement.

The Municipality are now considering ways and means for ensuring a more frequent evacuation of the buckets and methods for cleansing and disinfecting them.

There is no accommodation for dealing with slop-water and other refuse at present.

(d) There is some overcrowding in a certain number of dwelling-houses occupied by coloured people, particularly in the kraals of the location, which in some measure may assist in accounting for the presence of too great a percentage of cases of Phthisis in such a community as this, and the lack of stamina in the coloured physique.

(e) Slaughter-houses, butcheries, and bakeries are all kept in a sanitary condition.

(f) With regard to the sale and storage of human food, there is no ground for complaint.

(g) Few animals of any kind are kept in the village; such sheds, stabling, etc., as are in existence are well kept and cleanly.

(h) The native location and isolated native dwellings are kept in good order.

The kraals in the location are made of old sacks and rags thickly piled on bent branches, allowing practically of no ventilation, and are too much crowded. Although the general health of the natives resident in them appears to be fairly good, such dwellings are always a source of engendering disease, and facilitate the acquirement and spread of Tuberculosis, which is more or less prevalent in a district where it should be non-existent.

(i) The cemetery and native burial ground are kept in good condition.

(k) The Municipality are now considering the bringing into force of new regulations drawn up for them, which will efficiently deal with any general nuisances.

(l) There is no accommodation for the isolation of infectious or contagious disease.

(m) Fortunately this sub-district has been but lightly visited by infectious disease.

There have been eight cases of Enteric reported, all of which were among the native population, probably due to natives drinking water from open furrows, which was contaminated by themselves or the excreta of animals.

As the water-supply is particularly good there is no necessity for any such risk to be run. All the cases occurred within a short time (so I am informed); and it is likely that the later cases were infected while coming in contact with the earlier ones—possibly nursing them.



There has been a widespread epidemic of Mumps of a mild character. Diphtheria and Small-pox have been entirely absent.

The district has been well vaccinated, many of the people having been vaccinated in refugee and repatriation camps, both coloured and white. At present I am undertaking a vaccination tour of the district, and later will vaccinate the village, and, so far, have not come across many adults who do not show vaccination scars.

## 55. PIQUETBERG.

### (i) PIQUETBERG.

DR. J. DOMMISSE, ACTING DISTRICT SURGEON.

The health of the district has on the whole been more favourable than the year before. Typhoid Fever, although prevalent on some of the farms and a few cases in the village, has decreased considerably since the war. The better water-supply, both on the farms and in the village, has also much to do with this decrease. There were also a few cases of Diphtheria on some of the farms, which I think were due to overcrowding. Of Measles only two cases occurred at "The Rest." On the farms Kuilen and Brandhuis there was a small epidemic of Mumps. There were no more cases of Amaas (so-called Small-pox).

(a) The water-supply is in perfect order, but not yet sufficient for the wants of the village, especially in summer time. There is now a movement on foot to form a Municipality, which I hope will soon be an established fact. With the formation of a Municipality the inhabitants contemplate a big water scheme. In my opinion I think it is highly necessary that a Municipality should be formed, because the present Village Management Board has not power enough to enforce the necessary sanitary regulations.

(b) Sewerage and Drainage.—The tub system is still in force. Waste water is allowed to flow into the back-yards.

(c) Night-soil is better looked after now.

(d) Two different locations on the north and east sides of the village have been formed. There is not much overcrowding.

(e) Slaughter-houses are in good order.

(f) The sale, storage and preparation of human food are not very satisfactory.

(g) Kraals.—There are none in the village.

(h) As under (d).

(i) The cemetery is in good order.

(k) Good order is kept.

(l) No hospital accommodation exists.

(m) As mentioned at the beginning of my report. Vaccination was done in the latter half of the year.

### (ii) SUB-DISTRICT OF PORTERVILLE.

DR. FRANK P. BESTER, ADDITIONAL DISTRICT SURGEON.

(a) Water-supply.

(b) Sewerage and Drainage.

(c) Night-soil.

All these headings were fully gone into in my report of 1903, and also subsequently in a special report. Matters are still conducted in the same old unsatisfactory manner.

I have nothing further to report on these matters.

(d) Overcrowding.—Practically nil, but several huts in the location are absolutely unfit for human habitation.

(e) Slaughter-houses.—These—of which there are three in the village—should be periodically inspected by the Authorities, as they are not always as cleanly conducted as could be desired.

(f) Nil.

(g) (h) (i) and (k) Same as last year.

(l) Nil.

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(m) The district has been free from any outbreak of Enteric, Diphtheria or Small-pox. This favourable state of affairs was no doubt due to the splendid rainy season we have had.

The vaccination was performed at a time when farmers were all busy with their harvests, and consequently the numbers do not compare so favourably as before. The result, however, as far as I was able to ascertain, was excellent.

## 56. PORT ELIZABETH.

### (i) PORT ELIZABETH.

DR. JOHN GEORGE UPPLEBY, DISTRICT SURGEON.

(a) Port Elizabeth derives its water-supply from Van Staadens. The quality is good, but the quantity is insufficient.

(b) Drainage waits on this increased water-supply. The "Hill" at present has a system of drainage originally laid down for slop-water. A complete system is in contemplation.

(c) The tub system is in use. I have no improvement to record. The same primitive methods are still employed that have been in use for many years past.

Slopwater is conveniently thrown into the street.

Household and other refuse is removed by the Municipal Authorities.

(d) Overcrowding is under the supervision of the Town Council, who endeavour to minimise the evil as much as possible. The Asiatics will herd and pig together.

(e) The Municipal Authorities have followed out my recommendations and have effected some slight improvement under this heading.

(f) Periodical raids are made upon vendors of food, and the chief offenders are well known. The morning market is carefully watched.

(g) The keeping of cattle, swine, and other animals is prohibited in the Municipal area.

(h) I regret to say that Dassie's Kraal and Korsten are still centres of infection, and dangerous Plague spots. The Colonial Secretary officially visited Korsten, and was much impressed with the filthy condition of the location.

(i) Two cemeteries are in general use. One at the North End, and the other at the South End of the town.

Burials still occasionally take place in other cemeteries.

(k) The abatement of nuisances is under the supervision of the Town and Divisional Councils.

(l) Port Elizabeth is well endowed with hospitals, there being a General, a Lock, and a Lazaretto, besides a private nursing home. An up-to-date General Hospital is to be built.

(m) Number of cases of Enteric Fever, 120; of Diphtheria, 21; of Small-pox, nil.

Vaccination.—With the disappearance of Small-pox vaccination practically ceases, consequently now and again when Small-pox does occur, vaccination must be performed at high pressure.

Bubonic Plague still exists in our midst.

### (ii) NATIVE RESERVE LOCATION, NEW BRIGHTON.

DR. A. B. SIGISMOND POWELL, RESIDENT MEDICAL OFFICER.

(a) Water-supply.—The location water-supply continues to be fairly satisfactory. It is derived from Van Staaden's Reservoir, but obtains a certain amount of contamination through conveyance through temporary 3-inch pipes which are lined with a soluble preservative material.

This contamination, however, is not so marked as formerly. The water is very dark in colour after recent rains.

(b) The surface drainage is good, on account of the lie of the land, but there is not adequate provision made for storm water, which is apt to collect in pools.

There is no sewerage system.

(c) The removal of sterco, rubbish and slop-water continues to be carried out in a satisfactory manner by contract.



(d) No overcrowding exists; some of the dwellings have become damaged through want of occupation, but there are none actually unfit for human habitation.

(e) A site has been selected for a slaughter-house, but is not yet built upon. There are two butchers' shops in the location, who, however, slaughter in Port Elizabeth. There is one bakery, which is conducted admirably. No dairies exist.

(f) Food, for the most part, is obtained in Port Elizabeth and retailed out here. The various stores concerned in its distribution are conducted in a satisfactory manner.

(g) No pigs are allowed in the location. Other live stock is under the supervision of the Inspector of Natives.

(h) The order, cleanliness and sanitation of the location is good under the circumstances.

(i) A site for a cemetery has been selected, but, so far, all interments have taken place in the adjoining Municipal cemetery.

(k) No nuisances have been reported during the half-year.

(l) All cases of infectious disease occurring in the location are reported to the Divisional Council, Port Elizabeth, who take all the necessary steps for removal, disinfection, etc.

(m) Two isolated cases of Bubonic Plague have occurred since January 1st.

The first, an adult native male, was removed to the Lazaretto on May 6th. The Plague Authorities assumed all responsibility in the removal of the patient and contacts and the disinfection of dwellings. The infection in this case was directly traceable to the patient's place of work in Port Elizabeth, and he subsequently made a good recovery.

The second case, also a native male, was removed under similar circumstances on June 8th as a suspicious case.

There are practically no rats in the location.

A system of medical examination of all new-comers has been established, while all those desirous of leaving the location are obliged to undergo a similar examination before a pass of good health is granted.

There has been no further spread of the disease. No other outbreaks of infectious disease have occurred during the half-year, with the exception of a considerable number of cases of Phthisis Pulmonalis, which continues to attack the natives with much severity.

It is now, however, regarded as a notifiable disease, and steps are being taken to warn the relatives of its nature, and a system of disinfection of the dwelling, should death occur, is in course of adoption. All natives wishing to take up their residence here are required to show evidence of recent vaccination, while the Resident Medical Officer is in attendance daily for the purpose of vaccination and re-vaccination.

## 57. PORT NOLLOTH.

DR. W. R. GRIFFIN, DISTRICT SURGEON.

(a) The source of the water-supply is from wells at Five Mile Station, where, I am informed that its purity satisfies the standard, though it is somewhat brack, and that the supply is sufficient.

It is pumped by means of aermotors into a storage tank at Five Mile; from this it is drawn off into smaller tanks, and conveyed by rail to Port Nolloth, where it is again discharged into storage tanks; from these it is conveyed to the different houses in rolling tubs, fitted with a plug, and delivered by means of buckets into tanks for domestic use. This method permits of so many possible sources of contamination, both internal and external, that even the most stringent precautions could hardly exclude them all.

Alike from an economic and sanitary point, conveyance by means of a water main, and distribution by means of pipes, suggests itself as the best and only possible improvement.

(b) Nil.

(c) Night-soil, slop-water, and refuse are disposed of in buckets and bins, which were all formerly emptied into the sea from the end of the Jetty. Arrange-

ments are, however, now being made to convey the contents of the latter some distance up the line, to be there discharged.

(*d*) With the growth of the district, and pending the result of the late Land Commission, there must necessarily be a good deal of overcrowding and non-repair of dwelling-houses.

(*e*) The management of slaughter-houses, butcheries, and bakeries is tolerably satisfactory. There are no dairies.

(*f*) Canned eatables constitute the main food supply. The supply of fresh meat, vegetables and dairy produce is only supplementary.

(*g*) The quantity of cattle and swine kept is inconsiderable. The keeping of horses, mules, donkeys, and poultry constitute nuisances, for the abatement of which there is at present no remedy.

(*h*) There is no order, cleanliness, or general sanitation of the native location, where Pulmonary Phthisis prevails to an enormous extent, owing to ill-clothing, ill-housing, poverty, and vice (especially alcoholism).

(*i*) The burial ground, which is situated almost in the middle of the village, is in a deplorable state of dilapidation and neglect. The corrugated paling with which it is surrounded is in many places broken down by the weight of sand which the wind has blown and deposited against it.

(*k*) Nuisances are not generally abated.

(*m*) The half-yearly death rate in Port Nolloth for the six months ending 30th June, 1904, was 35·59 per 1,000. That of the white population, which but for a single death (viz., an infant brought from up-country in a dying condition), would otherwise have been nil, was 5·57. That of the coloured population 47·88. This enormous death rate among the coloured population is due mainly as stated in paragraph (*h*). It would, I believe, be at once considerably reduced, and in time reduced to a minimum, by limiting or entirely preventing the sale of intoxicating liquors to coloured people (the money they would thus save would be then devoted to providing better clothing, housing and feeding) and improved sanitary conditions.

Supposing the supply of water at Five Mile to be adequate and sufficiently pure for potable and general domestic uses, the fall being such as to give a sufficient "head," the delivery by means of a water main, and pipes to the dwelling-houses and to public drinking fountains, lavatories, urinals, and w.c.'s in the location, a water carriage system for the disposal of sewage, and the bin system for the disposal of house refuse, would be the most satisfactory and economical system of domestic sanitation.

The supply of a ship hospital, anchored in the "Roads," for isolation and treatment of infectious diseases, and a due regard for the proper paving and lighting of the streets, would also be extremely advisable. Owing to the small rainfall and porous nature of soil surface, drainage is not required.

With these as foundation, the legislation for the abatement of any further nuisances existing would become possible and probable.

## 58. PRIESKA.

DR. J. S. GIBBONS, DISTRICT SURGEON.

Heavy rains in January and March made a great change in the condition of the district. Large numbers of farmers, their servants, and in many cases their families, returning from the Orange River Colony and Griqualand, where they had trekked the previous year with their stock.

The births registered were 59; 33 European, 26 coloured.

Deaths were 29; 9 of these European.

The certified deaths were caused by Pneumonia 3, Diarrhœa 2, Bronchitis 2, and one each of Influenza, Dysentery, Syphilis, Meningitis, Apoplexy and Atalectasis.

(*a*) Water-supply excellent, as before.

(*b*) Sewerage and Drainage.—None.

(*c*) (*d*) (*e*) (*f*) (*g*) (*h*) (*i*) and (*k*) No change.

(*l*) Hospital accommodation.—None.

(*m*) A case of Diphtheria occurred at the Pont on 28th April, and a case of Scarlet Fever on the 17th May in the village. In each case the source of infection was unknown. No special steps were taken, except isolation, and none were required.

With regard to vaccination, there was none.



## 59. PRINCE ALBERT.

## (i) PRINCE ALBERT.

DR. R. STEVENSON, DISTRICT SURGEON.

Despite the prolonged drought the health of Prince Albert district during the first half of the year 1904 was fairly good. There was a small epidemic of Measles in the village and district, but it did not assume any serious proportions. There were isolated cases of Enteric Fever and Diphtheria.

The rainfall for the half-year ending 30th June amounted to only 2·87 inches. During the summer the heat of the sun is very great, but during most days of the week the heat is tempered by a south-east wind. At nightfall the wind drops, and in consequence the evenings are delightfully cool. The winter months are well nigh perfect.

The number of deaths registered in the whole district during the half-year was 125, due to the following diseases:—

Diarrhœa, 12; Phthisis Pulmonalis, 10; Measles, 12; Pneumonia, 18; Enteric Fever, 7; Enteritis, 8; Convulsions, 7; Heart Disease, 6; Old Age, 4; Bronchitis, 4; Severe Burns, 4; Gastro Enteritis, 5; Croup, 2; Dropsy, 2; Apoplexy, 1; Cancer of Breast, 1; Syphilis, 1; Drowning, 1; Asthma, 2; Premature Birth, 1; Cancer of Face, 1; Post partum hæmorrhage, 1; Influenza, 1; Teething, 3; Malaria, 1; Epilepsy, 1; Cancer of Stomach, 1; Snake Bite, 1; Rheumatism, 2; Improper Feeding, 4; Anæmia, 1.

(Forty-one of these had no medical attendant during last illness.)

The number of births for the same period was 185.

(a) The water-supply is derived from springs at the top of the Swartberg, and at its source is plentiful and of excellent quality. In its passage to and through the village it is so polluted as to be absolutely unfit for drinking purposes unless previously boiled. From its source in the mountains it runs in an open furrow to and through the village, and the furrow not being enclosed in any way, animals of all kinds graze on its banks, defœcating and micturiting in the stream. During the first part of its course the stream passes through beautiful scenery, and this is a favourite place for the inhabitants of the village to picnic. Imagine their feelings then on seeing these donkeys, goats and sheep polluting the water they have to drink. It is a most disgusting sight and yet it is an every day occurrence. There is an outspan at the first drift beyond the village, and although its use has been prohibited, the regulations have not been carried into effect, and consequently the water is here much polluted. From this point the furrow runs alongside and below the level of a very dusty road, and so whenever it rains, large quantities of filth laden matter are washed into the furrow, and this is the chief cause of pollution. After a heavy rain, the water is so dirty that no human being can drink it and even animals turn away in disgust. When the furrow is empty, as it is on certain days at different parts of the village, the bottom of it is covered with pieces of paper, old tins, leaves, and decaying matter of all kinds which have been blown or washed into it. The sides and bottom of the furrow in the main street are paved with large stones, the furrow in the back streets is **not** so favoured, and consequently its condition is still worse. It is a miracle there is not more illness amongst the inhabitants, as I am quite sure very few of them boil the water before drinking it.

As in previous reports, I again strongly recommend that the drinking water be put into pipes. The expense would not be very great, and would be willingly borne by the inhabitants, the majority of whom are in favour of this improvement. Those living in the lower ward of the village are specially to be pitied as there the water is at its worst, and the furrow is more often empty than in the upper and middle wards. The pipes ought to be laid from a point far up the stream where the purity of the water is certain. In justice to the Municipality, I may say that they are now willing to go on with a water scheme, but owing to the present financial depression the Colonial Government is unable to grant a loan, and as the rate-payers decided by a majority of one not to raise a local loan, the matter is dropped for the present.

Many of the native huts are situated above the level of, and close to, the main furrow, and here most of the washing takes place and the water further polluted. Until the water can be brought to and through the village in pipes, it can never be fit for drinking purposes.

(b) Sewerage and Drainage.—There is no system of sewerage or drainage carried out.



(c) Disposal of Night-soil, Slop-water, and Household and other Refuse.—The bucket system is now in vogue and is carried out by a contractor. The night-soil is carried away once a week beyond the limits of the village. The pails are not treated with any disinfectant and are never washed. Most, if not all, the houses have closets attached to them; the formation of cesspools is prohibited, and the use of existing ones discouraged. The slop-water is not dealt with and is generally thrown into the back yards. The disposal of household refuse is also unsatisfactory, it being left to each householder to dispose of it as he pleases. The consequence is that it is only cleared away when the amount becomes inconveniently large. It would be much better if the Municipality dealt with this in the same way as the night-soil and have it carted away at regular intervals beyond the limits of the village.

(d) There are many overcrowded dwellings, especially in the native quarter, and many unfit for human habitation.

(e) The Management of Slaughter-houses, Bakeries, etc.—The slaughter-houses are beyond the limits of the village and are kept in good order. The butcheries and bakeries are also clean and well-kept. There are no dairies in the village, but many people keep cows and sell milk. In some cases the kraals are too near the dwelling-houses, and their sanitary state leaves much to be desired. In summer time the smell is offensive.

(f) Sale, Storage, and Preparation of Human Food.—This is satisfactory.

(g) The keeping of Cattle, Swine, and other Animals.—The manner in which these animals are kept is disgraceful. The kraals are seldom cleaned, and they are far too near the dwellings.

(h) The Order, Cleanliness, and General Sanitation of any Native Location or Camp of Natives.—There is no native location, the natives being scattered over the village, the largest number being above the village and alongside the water furrow. The surroundings of these people are as filthy as they can possibly be. Some of the huts are not fit for swine and ought to be burned to the ground. It is scarcely possible to walk through the camp at night time. There is a large furrow running down the lower part of the camp and this is filled with all kinds of refuse. The water closets consist of a few boxes nailed together and covered with bags. The whole of these coloured people ought to be removed to the other side of the village. The existing huts do not belong to the tenants, and only very few natives pay rent or taxes.

(i) Cemeteries and Burial Grounds.—The burial grounds are kept in good order. There is no reason to think they are a cause of ill-health.

(k) The Abatement of Nuisances Generally.—There is no apparent anxiety on the part of the Municipality to better the sanitary state of the village. There is a Sanitary Inspector, who is empowered to take action to stop any nuisance when complaints are lodged. The majority of the streets are still in a very bad condition, and the method of repairing them the most primitive. When it rains, the water runs down the centre of the streets until it finds an opportunity of falling into the drinking stream. Bricks, large stones, and old tins lie scattered about. The condition of the main street is very bad, and for this the Divisional Council is responsible. The Municipality are anxious to take over the management of this street, but the Divisional Council refuse to grant a sum sufficient to keep it in good repair. In the upper ward the street is crossed by two deep sluits which ought to have bridges over them. There is no improvement in the condition of the native quarters. Nothing has been done in the way of improving the drinking water. The Municipality still refuse to light the street lamps which were presented to the village by public subscription. All kinds of refuse are still deposited close to the side of the main roads leading from the village and within the Municipal area.

(l) There is no hospital accommodation in the district for the isolation and treatment of cases of infectious disease.

(m) The Presence and Spread of Infectious Disease.—There was a small epidemic of measles in the village and district in the beginning of the year, and several fatal cases occurred.

There were also several cases of Diphtheria reported. One case occurred on the farm Wilderbosch near Fraserburg Road. The infection probably arose from the cases reported there last year. In the month of March a case occurred in the Prince Albert Hotel. The patient, a traveller, came from Calitzdorp district where Diphtheria was epidemic. All necessary steps were taken to prevent the spread of the disease and no more cases occurred. A case of Enteric Fever occurred in the School House in February, the patient contracting the disease in a neighbouring village. All precautions were taken and again successfully. Phthisis is common amongst the coloured people, and it seems on the increase. There are also several



cases of Phthisis amongst Europeans. Those under treatment are duly warned of the danger of spitting in the streets and in public buildings. There were several cases of Scurvy in the Gaol Hospital, the diet of the prisoners being the cause of this disease. I did not vaccinate any people during the half-year; the annual tour takes place at the end of the year.

(ii) SUB-DISTRICT OF LAINGSBURG.

DR. H. W. STEPHENS, DISTRICT SURGEON.

General.—The health of the village and neighbourhood has been exceptionally good during this period. There have been a few cases of zymotic disease but no epidemic, whilst there has been a marked absence of the usual pulmonary diseases prevalent in the winter time; especially has this been the case among children. I have never had so few cases of Bronchitis and Pneumonia as during this six months; the only reason I can even suggest for this is that there has not been the usual amount of wind, and very few days have been rendered unpleasant by wind and dust; the trees in the village streets undoubtedly help greatly in this respect.

Cases of Phthisis cannot be reckoned when speaking of lung diseases in this respect, as they are nearly all among visitors, and with regard to these particular cases I think it is a great pity that some control cannot be exercised over them, either by the Government or by the Local Authority with regard to enforcing the thorough disinfection of sputa and excreta, and only allowing them to be received into houses where the rooms are such as to permit of cleaning and disinfection, and the owners known to be capable and trustworthy to carry out such measures as are now generally regarded as essential to prevent the spread of an infectious disease, and one which is particularly insidious and deadly.

(a) The water-supply is still in the same unsatisfactory state that I have already referred to in previous reports.

(b) There are no sewers or drains.

(c) Night-soil is removed twice a week to a depositing ground on the west side of the Buffels River. There is no improvement in the method of removal; the waggon on which the tubs stand, into which the night-soil is emptied, still emits a horrible stench.

There is no arrangement for the removal of slop-water.

Household refuse is removed twice a week.

There is still at least one cess pool in the village.

(d) There are no marked instances of overcrowding, but several of the houses occupied by coloured people are certainly not above suspicion in this respect, whilst the apologies for dwellings in the location would certainly not be regarded as fit for human habitation in any more civilised country.

(e) Slaughter-houses, etc., are managed as well as can be expected under the circumstances.

(f) There have been one or two prosecutions under the Food Adulteration Act.

(g) There has been a decided improvement in the village in this respect.

(h) The only remarks to be made in regard to the native location are that there is no order, no cleanliness, no sanitation, and no proper water-supply in it.

(i) There are two burial grounds on the west side of the river, one for the Christians and one for the Jews. A well was started in the former with a view to planting trees, but owing to want of interest in the scheme, was never finished. There are two graveyards on the east side of the river, the coloured, and old and very neglected European one, not now in use.

(k) Owing to the absence of confirmation by Government of the rules drawn up by the Municipal Council with a view to the abatement of nuisances and the good order of the village, little progress has been possible in this direction.

(l) No hospital accommodation of any sort exists here.

(m) During the period under consideration the following cases have been reported to the local authority under the Infectious Diseases Notification Act.

Enteric Fever.—European: 2 female adults, mother and daughter, daughter died. Coloured: 3 male adults, one death; one male and 2 female children.

Diphtheria.—European, 1 male adult; four males and one female children. Coloured: Nil. No deaths.

Note.—I attended one fatal case of Diphtheritic Croup in a child of two years and nine months, at a farm about fifteen minutes' drive from the village.

Small-pox.—None.



Vaccination.—At a public vaccination held in the Courthouse, Laingsburg, in February, seven persons were vaccinated, four insertions each, 22 out of the 28 insertions being successful.

My experience with the lymph supplied me has been that, if fresh, almost every insertion takes, but if more than three weeks old success is very doubtful.

Births registered from the village were four European males, five European females; eight coloured males, seven coloured females (one coloured male being still born).

Deaths.—The following is a summary of deaths registered here as occurring in the village:—

Europeans.—One adult male from Malarial, Phthisis, etc. (visitor); one male infant from Infantile Diarrhœa; one male infant from Convulsions, aged about 3 weeks; one male, about 60 years of age, from Cerebral Thrombosis; one female, aged 19 years, from Enteric Fever.

Coloured.—One old man from Chronic Bronchitis, etc.; one old woman from Chronic Bronchitis, etc.; one girl, about 16, from Phthisis; one male child, aged 19 months, from Phthisis; one male and two female children from Infantile Diarrhœa; one female infant, about 7 months, from Convulsions; one boy of seven years from Pernicious Anæmia; one adult, about 20, male, from Enteric Fever; one female, about 16, from Enteric Fever; one female, about 12, from Enteric Fever; one female, about two, from Enteric Fever; one male, prematurely born, lived six hours.

## 60. QUEENSTOWN.

### (i) QUEENSTOWN.

DR. H. T. BATCHELOR, DISTRICT SURGEON.

(a) The water-supply is not sufficient for all purposes during the winter months when there is a drought. It is obtained from the Komani River, and is run into a reservoir through a pipe about three miles long. When the supply in the reservoir falls it is increased by pumping from a pool in the Komani below the intake of the piping.

As the Komani drains the Bongolo basin, and there is a drift above the intake of the piping which is crossed by wagons, carts, etc., the water must be polluted.

The analysis of the water obtained some years ago proved it to be polluted, and it would be better if a filtration bed were used to purify the water used for drinking purpose.

All reasonable care is taken to prevent the water being polluted, both above the intake and in the reservoir.

(b) Drainage is surface, and it runs into the Komani River as it flows through the town. Sewerage, there is none.

(c) The collection and disposal of night-soil, slop-water, and refuse is done by a contractor, and the Sanitary Inspector's duty is to see that it is properly carried out.

(d) There are no overcrowded dwellings or dwellings unfit for human habitation allowed in the town.

(e) The management of slaughter-houses, butcheries, etc., is supervised by the Sanitary Inspector.

(f) The sale, storage and preparation of human food is supervised by the Sanitary Inspector.

(g) The keeping of swine, cattle, and other animals is regulated by the by-laws of the town and the Sanitary Inspector's duty is to see that they are not infringed.

(h) The order, cleanliness and general sanitation of the native location is under the supervision of the Location Superintendent, and is satisfactory.

(i) Cemeteries and burial grounds are well looked after.

(k) The abatement of nuisances generally is under the supervision of the Sanitary Inspector.

(l) There is a Lazaretto used for natives who have Small-pox, and it is under the Local Authority.

It is sufficient for the purpose.



(*m*) There have been reported at the Town Office four cases of Diphtheria, 22 of Enteric, and one of Scarlet Fever. Three European males have died of Enteric in the Queenstown Hospital, and one native child died of Diphtheria in the Hospital. I have every reason to think that vaccination when performed by me has been successful, as I am careful to use fresh lymph; but those who are vaccinated gratuitously do not often return for inspection.

The causes of Enteric are often obscure, and although it is reasonable to think the water-supply has a great deal to do with the origin of the disease, it is also likely that other causes may contribute.

There has been no Bubonic Plague here.

(*ii*) SUB-DISTRICT OF STERKSTROOM.

DR. J. B. CUMMING, ADDITIONAL DISTRICT SURGEON.

(*a*) The water-supply is unsatisfactory both as to quality and quantity. It is fairly pure at its source, but becomes very much polluted in its course along open furrows through the village. Nothing short of conveyance in pipes will remedy the defect.

(*b*) Sewerage is still disposed of as it was and is by the aboriginal inhabitants. Drainage is very defective, most of it going into the open water courses. Lately an attempt has been made to make drains underneath the water furrows.

(*c*) Night-soil is removed regularly by closed cart, and removed to trenches as far as possible from the houses. Household refuse is removed in open carts and emptied on the river bank.

Slop-water is not provided for.

(*d*) No instances of dwellings being overcrowded or unfit for human habitation have come to my notice, but the standard is not very high.

(*e*) Slaughter places, butcheries, bakeries, dairies, etc., are satisfactory.

(*f*) The sale, storage and preparation of human food, in so far as it is undertaken locally, does not call for any adverse remark from me.

(*g*) Cattle and sheep are kraaled in the towns, but to a less extent than formerly. I believe there are no pigs.

(*h*) The native location is not alarmingly dirty, but it will take another century or more to educate the natives up to even the present standard of European ideas of cleanliness, and the use of privies instead of the convenient donga, or side of the house.

(*i*) Cemeteries are conveniently situated, and are not so placed as to menace the health of the village.

(*k*) There have been some prosecutions, convictions and punishments for committing nuisances, and I believe the effect has been beneficial.

(*l*) Two brick rooms about twenty yards apart, more than a quarter of a mile from the nearest dwelling, are used for the isolation of cases of infectious disease; the rooms are about 9 feet square and 12 feet square respectively. They belong to the Municipality.

(*m*) Since the beginning of the year and up to the end of June there have been twenty-one cases of Typhoid Fever, one of Scarlet Fever, and one of Diphtheria. There has been no Small-pox for more than a year.

All parts of the town have been pretty equally affected with Typhoid Fever. The cases of Diphtheria and Scarlet Fever were nearly in the centre of the town.

Isolation was carefully attended to as far as I am aware, and no case would definitely be said to have arisen from another. The Local Authority was not asked to take any action in any of these cases, and did not do so.

In almost all cases of Typhoid Fever the source of contamination has been reported to be the water-supply, and seeing that dirty Kafirs and Hottentots and white people also live close to the furrow, empty their utensils near and perhaps in the furrows, dip their often filthy dishes in the water, and otherwise pollute it, I think there is no need to seek any other cause.

I am not aware of any directly precautionary measures having been adopted for the prevention of an outbreak of Bubonic Plague. Rats are known of here; mice, rabbits, and hares are plentiful, and nothing has been done to exterminate them.

There have been a few cases of Pneumonia during the winter and autumn, but no epidemic. There is no Scurvy in the town or neighbourhood. Occasionally a case comes from the mines at Cyphergat, Molteno and Johannesburg.



## (iii) SUB-DISTRICT OF WHITTLESEA.

DR. J. K. MURRAY, ADDITIONAL DISTRICT SURGEON.

There has been no unusual occurrence in the public health of this part of the Division during the last six months. In the rural area and in private practice in the adjoining Division of Cathcart cases of Diphtheria have been met with which will be dealt with later on in this report.

(a) Water-supply.—The Village Board did not succeed in borrowing £1,000 from Government to increase the reservoir, so that scheme is meanwhile in abeyance. In the dry weather of late months water has been scarce, not only for irrigation, but for drinking. At present the only source for either purpose is the Ox Kraal River. This is only partially a running stream. It would be stagnant if the flow were dependent only for its supply from the river higher up, but there are numerous fountains during its course which augment the supply.

Several exist near the village. It is a pity that some of them are not used for conservation of water by pipes or small aqueducts for drinking water. Boring in suitable parts of the village, as previously pointed out, would probably yield a satisfactory flow from an efficient borehole. Many such boreholes are working now in similar strata on farms around the village. The provision of an adequate supply of pure drinking water which did not diminish or entirely depart in dry seasons would seem a duty incumbent on a Local Authority anywhere, and have priority to any scheme for providing irrigation water for gardens or for peasants growing cereals on small village allotments. Evidently such is not the view held by the Village Fathers. The fact is that the irrigation scheme is being financed and finessed so that the house-owner pays a larger share in proportion than the peasant who is to use the water on his allotment.

As regards the rural area, many of the farms have sunk boreholes giving a good supply of water, so that their net supply has improved.

(b) Sewerage and Drainage.—The main street continuous with the Queen's Town road is being repaired at present. The result, good or bad, will be evident in a few months when the rains come.

(c) There is no change in the method of disposal of night-soil, etc.

(d) The houses of the coloured and semi-coloured population near the river require occasional improvement.

(e) There is no change in the management of the butcheries.

(f) and (g) There is no scandal in these matters so far as is known.

(h) The native location of Whittlesea is in fairly good order. There has been no infectious disease in huts. The death rate is very small.

Shiloh.—There has been no heavy death rate. Some cases of Measles were fatal. The general condition of the location is good.

Engotini.—The health has been good, and the general condition good.

Ox Kraal Location.—The actual figures for birth and death rates are not procurable, but there is no unusual amount of sickness in location.

Kamastown Location.—Some more Lepers have been unearthed at Zangokwe during the half-year.

There are two Village Board areas in these locations, Hackney and Kamastown. They have no regulations on sanitary matters. No vaccination is regularly carried out in them in terms of the Public Health Act.

(i) The cemetery in the village is kept in good order. The care of graves here has become quite a cult.

(k) I am informed by the Village Board that there have been no prosecutions for offences against the public health during the half-year. The Water Supervisor is also Sanitary Inspector.

(l) There is no hospital accommodation.

(m) There have been eight cases of Diphtheria on farms around during the half-year. Most were of a mild type. Diphtheritic bacilli were found in most of the cases, and the bacteriological diagnosis confirmed by the Bacteriological Institute, Graham's Town. Other cases across the Cathcart line of boundary seen in private practice were similarly examined bacteriologically and confirmed in Graham's Town. So far as my partner and I saw every precaution was taken by the parents and guardians concerned in combating the infection. The cases were notified to the various Local Authorities concerned, but I am not aware of any steps taken by them with a view "to preventing or suppressing outbreak."

Inside the Queen's Town line of boundary there has been no case of Enteric Fever.

There has been no Small-pox.



## 61. RICHMOND.

DR. JOHN H. BAM, DISTRICT SURGEON.

(a) The water-supply for domestic and irrigation purposes has been abundant. The water-supply comes from both east and west ends of the town.

(1) The east end is the main supply, both for domestic and irrigation purposes. For irrigation purposes it is stored in a dam in the river bed above the town. Below this dam there is a well-built spring from which most of the drinking water for the town is carried in buckets. The spring is constant and strong, the water being pure. I am not aware of any pollution, either at its source or on delivery.

(2) The west end water-supply comes from a reservoir in an open furrow. This water is used for drinking purposes by a number of coloured families living in this part of the town. This supply is liable to contamination at its source in the dam, and during its course in the furrow. I certainly think that the reservoir should be fenced, and the furrow covered.

(3) There are two pumps supplying water for domestic purposes.

(i.) The pump in the Square.

(ii.) The pump in the Show-yard.

These are not liable to pollution.

(b) Nil.

(c) Night-soil.—The night-soil pails are now emptied regularly once every eight days. The returned empty pails are thoroughly disinfected. The pails are now emptied one mile towards the south side of the town.

Slop-water.—There is no regular system of removal of slop-water. It is left to the individual householder. Those who have gardens find these a suitable outlet for its disposal.

Household and Other Refuse.—Its disposal is satisfactory, being removed regularly in carts.

(d) Among the white population there is no overcrowding, but among the coloured population there is often overcrowding. I am not aware that any steps have been taken to avoid this.

As regards dwellings unfit for human habitation, there are many in the town proper, occupied chiefly by coloured people.

(e) There are four slaughter-houses and butcheries. These are all well kept. It would be an improvement if a public slaughter-house were erected.

(f) The Sale, Storage and Preparation of Human Food.—These are entirely left to the local store-keepers. Vegetables are brought in fresh from the farms, or gardens in the town, and sold on the daily market. Our sole manufacture is soda water, for which the filtered river water is used.

(g) In many cases horses are kept in too close proximity to dwelling-houses. A few swine are kept in town; these are not allowed within twenty yards from the nearest dwelling.

(h) The Order, Cleanliness and General Sanitation of the Native Location.—The huts are dilapidated and overcrowded, and too close together. The location is not laid out in streets, the huts are built irregularly. The difficulties of keeping the location clean are therefore greatly increased, and in many respects sanitation is defective.

(i) Cemeteries and Burial Grounds.—There are three burial grounds.

(1) Dutch Reformed; (2) English; (3) Coloured. They are all well kept.

(k) There can be no doubt that the general condition of the town has greatly improved.

(l) There is a hospital about one mile from the town. It is a brick building consisting of two rooms each 14 by 14 feet and 14 feet high, ground floors and mud roof. It is in a most dilapidated state, and is under control of the Municipality.

(m) Isolated cases of Typhoid Fever and Diphtheria occurred throughout the district. The Typhoid Fever was chiefly due to carelessness of the individual patients, drinking polluted water. Nowhere was Typhoid Fever or Diphtheria in epidemic form, nor could any direct cause be found for the cases of Diphtheria.

## 62. RIVERSDALE.

DR. J. W. DE VOS, DISTRICT SURGEON.

(a) The drinking water brought to the village in pipes is liable to contamination before reaching the intake, as the river itself might be polluted by drains which run into it from certain farms; further, it runs in an open furrow skirting



the Ladismith high road. I should therefore recommend that the pipes be taken further up in the river. The reservoir should also be covered over, as the village is extending in that direction.

The water running in the irrigation furrow is largely contaminated along its course, and I attribute the prevalence of Typhoid in the lower part of the village mostly to its condition. Many inhabitants persist in using this water both for drinking and general purposes. The furrow should be lifted over the "Begratfenis Kloof," and the village drainage should be kept out of it.

Further, means should be employed to educate the inhabitants in regard to sanitation in general, and the causes of Typhoid in particular.

(b) Sewerage and Drainage.—The Municipality has been constructing some very decent drains, but several other drains require attention, as at present most of the drains have not a free run, and consequently the soil gets saturated with organic putrifying matter.

(c) The Collection and Disposal of Night-soil, etc.—These are well attended to. The Sanitary Inspector is doing his best with the reluctant inhabitants who are but too prone to be lax in their habits.

(d) Overcrowded dwellings still exist, and these are more in evidence now on account of the large influx of railway work-people.

(e) The Management of Slaughter-houses, Bakeries, Dairies, etc.—No particular remarks, except that dairy utensils are washed in the irrigation furrow; also milk is brought in to town from farms where any insanitary condition may prevail.

(f) No remarks.

(g) Keeping of Animals, etc.—I should recommend that the keeping of pigs in small back-yards be done away with at once.

(h) No native location exists.

(i) Cemeteries, etc.—New cemeteries have been granted; the sites are the best procurable, but the drainage from these sites should be attended to before using the cemeteries.

(k) There is a slow but sure decrease in nuisances.

(l) No hospital for infectious diseases exists.

(m) The Presence and Spread of Infectious Diseases.—In the beginning of the year a few isolated cases of Diphtheria occurred in the village. On one or two farms in the Karroo there was quite a little epidemic. At the end of June the town and district were practically free of Diphtheria.

Typhoid Fever has been prevalent all the time, and shows no sign of abating. Every year Typhoid occurs at the bottom of the town and along the Kafir Kuils River. Now it has spread throughout the district, and isolated cases are occurring in the village.

I have traced the cases in the district to their origin.

On the 19th May, 1904, two cases occurred on the farm Assegaaiboschfontein, in a hut which was four yards above the water-furrow, which runs past several farms. These people had been spending the week-end with some relatives at the lower end of the village, and contracted it there, as in that family five had it. I immediately warned these people not to pollute the water furrow; I also visited the farms along the furrow, warning and instructing them, but in most cases this advice was treated with contempt. Within the fortnight Typhoid had started amongst them, and there were 29 cases, of which 8 were coloured. There were no fatalities.

On the 1st May, 1904, a case of Typhoid was discovered on the farm De Novo, which is also on a water furrow leading past ten dwellings. The case was that of a native boy who had contracted it along the railway. Instructions and warnings were also given to the inhabitants along the furrow, but contamination had already taken place, and in a short time thirteen whites and eleven natives were down. Two fatalities occurred.

On the farm Doornkraal there were four cases. Typhoid is endemic there, and cases occur every year. Here too I attribute the prevalence to a water-furrow going past several farms. On the farm Driefontein, close to Albertinia, some natives who had been working on the railway were laid up with fever, and since then several other cases have occurred there, several proving fatal; all were natives.

In addition to the suggestion about the water-supply under (a), drainage under (b) and overcrowded dwellings under (d), I would suggest that the education of the population regarding the causes and prevention of Typhoid be encouraged by the Authorities as the greatest fallacies as to its causes prevail amongst the populace.



## 63. ROBERTSON.

DR. L. W. STEVENS, DISTRICT SURGEON.

- (a) I have nothing to add to my report of last year.
- (b) There is no system of sewerage or drainage.
- (c) During the past half-year a considerable improvement has been made in the more frequent disposal of night-soil from the town of Robertson, but in the other urban centre, Lady Grey, the same unsatisfactory condition exists. No arrangements are made for the disposal of slop-water, but household and other refuse is removed from the larger urban centre, twice per week, to places beyond the Municipality.
- (d) Very considerable overcrowding is now taking place in many of the houses of the coloured people, and means should be taken to remedy this evil as soon as possible. There are several dwellings barely fit for habitation.
- (e) As reported last year.
- (g) The keeping of cattle, swine, and other animals is supervised by the Municipal Authorities.
- (h) There are no locations, but a considerable number of coloured people live at Jubelsdorp, which is situated just outside the town, where the insanitary conditions prevailing are a menace to the town.
- (i) The burial grounds are situated outside the town, and are kept in a satisfactory state.
- (k) As previously reported.
- (l) No hospital accommodation exists, which is much to be regretted.
- (m) During the past half-year seven cases of Typhoid and one of Small-pox have been notified.

The Small-pox case, that of a coloured female, was isolated, as well as the six contacts, and vaccination was carried out satisfactorily. There were no other outbreaks.

Taking the district as a whole, the community has been comparatively free from infectious diseases.

The death rate among the coloured people has, owing to the privations caused by the "bad times," been unusually high.

The chief causes of death were:—Diarrhœa, 14; Phthisis, 12; Convulsions, 10; Pneumonia, 6; Bronchitis, 6.

## 64. SIMON'S TOWN.

DR. H. CLARKE, DISTRICT SURGEON.

On the whole the public health of this district was good during the half-year.

(a) Water-supply.—Satisfactory at present, both as regards quantity and purity. No change has taken place since my last report.

(b) Sewerage and Drainage.—The town is rapidly becoming drained by an efficient system of pipe drainage. Surface drains are kept clean by the Municipal scavengers.

(c) Night-soil is collected by the Municipal carts and thrown into the sea. Slop-water is either carried away by surface drains or sewer pipes; household refuse is also collected by the Municipality and burnt.

(d) The Simon's Town Municipality has compelled owners of tenement houses to put them in proper order, to improve ventilation, construct drains and connect with sewers, and erect properly equipped water-closets. Overcrowding exists to some extent, but it is an evil almost impossible entirely to prevent. There are no inhabited houses unfit for human habitation.

(e) Little slaughtering is done now, but the slaughter-houses are kept clean. Other trades are carried on in a satisfactory manner.

(f) The sale, storage and preparation of human food is watched by Municipal sanitary inspectors, and is on the whole clean.

(g) Few cattle are kept, and very few swine.

(h) The native location is fairly clean, considering the habits of the dwellers, and it is under Municipal control.

(i) The cemeteries are clean and satisfactory.

(k) The Municipal Council has a Health Officer and two Sanitary Inspectors who keep a sharp eye on nuisances.

(l) The Municipal and Divisional Councils have an arrangement with the Cape Town Council, all cases of Small-pox being sent to Rentzkies. Other cases, such as Scarlatina are superintended by the Health Officer or Sanitary Inspector whilst in the infective stage, and premises are subsequently disinfected.

(m) There were only two cases of Enteric Fever during the half-year, one an imported case, and the other contracted in the town. The only other case of infectious disease was one of Scarlatina. 218 rats were delivered at the Municipal office and paid for at the rate of 3d. each, and 150 were destroyed by the Sanitary Inspector.

Vaccination in outlying parts of the district was satisfactory, in fact, I do not know any white children of the agricultural class who are not vaccinated, and few coloured, but I regret to say, there must be a large number, both of white and coloured children, and even adults, living in the towns between Simon's Town and Muizenberg who have never been vaccinated.

No indigenous case of Leprosy has been seen by me since the Compulsory Segregation Act was promulgated some years ago, and all lepers removed.

The district was free from Small-pox during the six months.

With regard to the working of the Contagious Diseases Prevention Act of 1885, I have dealt with Part I. in my report on the Act. Part II. is rarely required in this district, and only in the case of paupers.

## 65. SOMERSET EAST.

### (i) SOMERSET EAST.

DR. GEORGE A. LEGGE, DISTRICT SURGEON.

- (a) The water-supply is as before reported.
- (b) Sewerage and drainage, as before.
- (c) Nothing new to report *re* night-soil. Slop-water and dust-heaps are removed daily under contract of the Municipal Council.
- (d) and (e) As before.
- (f) A cold storage has been instituted by private enterprise.
- (g) to (k) As before.
- (l) No hospital accommodation is provided.
- (m) No outbreak of infectious disease occurred.

### (ii) SUB-DISTRICT OF PEARSTON.

DR. G. B. WOODROOFFE, ADDITIONAL DISTRICT SURGEON.

- (a) Water-supply is derived from tanks, which catch rain water, and wells. The location gets its water from springs in the river bed.
- (b) Sewerage and Drainage.—Nil.
- (c) Disposal of Night-soil and Slop-water, etc.—Cess pits and the backyard.
- (d) Overcrowded Dwellings, etc.—I observed none amongst the whites. It is a common occurrence amongst the coloured population to find six to ten persons sleeping in a small room.
- (e) The Management of Slaughter-houses, etc.—Of the two butchers, one kills at home and the other on the outskirts of the town.
- (f) No remarks.
- (g) The Keeping of Cattle, etc.—Each occupier keeps what he wishes on his premises.
- (h) I often see an official of the Municipality in the location, but it is very noticeable also that there is no law governing sanitation and cleanliness here in force.
- (i) Cemeteries, etc., are in good order.
- (k) Abatement of Nuisances, etc.—Nil.
- (l) Nil.
- (m) The Presence of Infectious Disease, etc.—The district has been practically free from infectious diseases since January 1st.



## 66. STELLENBOSCH.

## (i) STELLENBOSCH.

DR. J. H. NEETHLING, DISTRICT SURGEON.

The general health of both town and district has been exceptionally good. There has been no epidemic of the more serious infectious diseases. There have been many cases of Measles, Scarlatina, and Mumps, but these have caused very few deaths.

Last year I reported fully on the present state of the sanitary defects, and the few attempts at their rectification. There is, unfortunately, nothing new to state, either with regard to any improvements or much abatement in their danger.

(a) A commission of enquiry was held on the matter of the water-supply and the proposed new scheme. I was not consulted on the matter, and no start, as far as I am aware, has been made in the works.

(b) Sewerage and Drainage.—There are all the dangers and defects of last year still unattended to.

(c) The disposal of night-soil, slop-water, and other refuse is as satisfactory as can be expected. The streets, however, could be more often and more properly cleaned of bits of paper and other rubbish, than is at present the case.

(d) There are no overcrowded dwellings or any unfit for habitation within the Municipal area. The class of house being built now is very much superior to that allowed some years ago.

I am afraid the same cannot be said of the district and the smaller hamlets. I must again draw attention to the fact that such places as Kuils River, Eerste River, and Raithby are not being inspected.

(e) The Management of Slaughter-houses, etc.—During the last half-year several inspections were made, and many defects remedied. It is to be hoped that such inspections will become periodical.

(g) The Keeping of Cattle.—This has never proved a nuisance or a danger to health.

Swine are not allowed in thickly-populated areas. Here, however, sufficient strictness in the enforcing of Municipal regulations is not observed.

(i) Cemeteries, etc.—No burials are allowed near any dwellings. No new burial grounds have been allowed within the Municipality or without due consideration to the nuisance or danger such places might become to near neighbours.

(k) Nuisances, etc.—The improvements noted in my former reports in regard to the streets and water furrows are being gradually pushed. Under the circumstances the authorities are doing their best to make the town a healthy and pleasant one to live in.

Many new and handsome houses have lately been built.

(l) The hospital has been finished, and all efforts are being made to collect funds to carry on the good work.

## (ii) SUB-DISTRICT OF SOMERSET WEST.

DR. WILLIAM HEWAT, ADDITIONAL DISTRICT SURGEON.

During the half-year ended 30th June, 1904, the sanitary condition of the place has been very much improved owing to a Municipality having been established in this town at the commencement of the year. The duties of street cleaning and attending to water furrows has been carried out by the hard labour prisoners as well as men employed by the Municipality.

(a) The conditions of the water-supply still remain the same. The water for drinking purposes is mostly got from the river, whilst a water-supply brought down in pipes from the higher reaches of the river would be of great convenience and is greatly needed.

(b) Sewerage and Drainage.—The want of a proper sewerage and drainage system in this town has long been needed, but this will soon be a thing of the past as the Municipality are taking steps to deal with the matter.

(c) The Collection and Disposal of Night-soil, etc., has been left in the hands of each separate individual, but this, no doubt, will also be remedied by the Municipality.

(d) As far as is known, there are no cases of overcrowding, and all dwelling-houses are kept in a satisfactory condition.

(e) All slaughtering is carried on outside the village. Butcheries, bakeries, etc., are also satisfactory.

(g) The keeping of cattle, swine, etc., is in the hands of the owners themselves without any control from outside.

(h) There are no native locations.

(i) The cemeteries are situated on the outskirts of the village and are in good order.

(k) The police do their best they can towards the abatement of nuisances.

(l) There is no hospital accommodation in this sub-district.

(m) This sub-district was very clear of infectious diseases during the period 1st January 1904, to 30th June, 1904.

#### SOMERSET WEST STRAND.

The improvements in the sanitary condition of the Strand are still going on and no doubt things will be more satisfactory by the end of the year.

(a) Most of the houses get their water-supply through pipes brought from far up the river, and the occupants of these houses have been fairly healthy.

(b) The septic tanks mentioned in my last report have proved fairly satisfactory.

(c) The night-soil, etc., not removed as above is regularly removed by cart, the tub system being in vogue.

(d) The number of houses in the limits of the Municipality still continues to increase.

(e) There are no complaints regarding slaughter-houses, etc.

(f) The Municipal regulations are being strictly enforced with regard to pigsties, etc.

(h) There are no native locations.

(i) The cemeteries are situated on the outskirts of the Municipality.

(k) Nuisances are promptly dealt with.

(m) During the period 1st January, 1904, to 30th June, 1904, there have been very few cases of infectious diseases.

#### GORDON'S BAY.

Gordon's Bay has a splendid water-supply and is increasing in size. This place is kept in good sanitary condition under the vigilant care of the Village Management Board.

#### 67. STEYNSBURG.

##### DR. A. V. SHINE, DISTRICT SURGEON.

(a) The town receives its water-supply from the same four sources as I mentioned in my report for 1903.

The Municipality have recently erected an oil engine which, with the air motor, keeps a constant supply of excellent drinking water in the five tanks at the head of the Market Square.

None of the supplies, as far as I can ascertain, are polluted.

(b) The surface drainage of the town continues excellent.

Sewerage and Drainage.—Nil.

(c) Night-soil.—The tub system is universal and is well attended to by the Municipality. Slop-water is collected by the Municipal carts as often as is necessary.

Household and other refuse is removed by the Municipal carts daily.

(d) Nil.

(e) The slaughtering and cleansing of carcasses continue to be done outside of town. Butcheries and bakeries are kept in a cleanly condition. There are no trades here affecting health.

(f) The sale, storage, and preparation of human food is satisfactory.

(g) See last year's report.

(h) The native location continues to be kept orderly and clean, and the general sanitation is satisfactory.

(i) The three cemeteries, viz., one European and two native, are all still in use and kept in good order. I understand the Municipality propose shortly to open an additional native cemetery.



(k) The abatement of nuisances generally is well attended to, any nuisance detected by the Sanitary Inspector, or reported by any person, being promptly seen to by the Municipal Authorities.

(l) With the exception of the gaol hospital, there is no hospital here of any description for the reception of infectious or any other kind of illness, or accident cases. I would again impress on the Government the urgent need that exists here for an infectious diseases hospital.

(m) There have been several cases of Enteric Fever in town, and I understand a few in the country. Only one death has occurred from this disease.

I have not been able to trace the causes of Enteric, either in my brother practitioner's practice, or my own.

There have been a very large number of cases of Diphtheria since my last report, and nine cases have proved fatal.

Small-pox.—Nil.

Vaccination.—No public vaccination has been performed in this town or district for five and a half years.

104 births have been registered at the Civil Commissioner's office for the half-year ending 30th June, 1904. I doubt if one per cent. of that number has been vaccinated! There must now be upwards of 2,000 persons in town and district unvaccinated, and of course they will so remain until the law is put in force, if it ever is, or until we are favoured with an outbreak of this loathsome disease, when through sheer fright they will get inoculated.

At any rate, when this disease does give us a call, it has ample material to work on in town and country.

Bubonic Plague.—Nil.

Scurvy, Epidemic Pneumonia, etc.—Nil.

## 68. STEYTLERVILLE.

DR. JOHN DON, DISTRICT SURGEON.

(a) to (k) See remarks in reports for previous years, there being no change in the conditions as described therein.

(m) Infectious disease has not been very prevalent during this half-year. Whooping Cough still exists more or less scattered throughout the whole district.

Small-pox.—There was an outbreak of Small-pox during the half-year at the farm Nashvale. The source of this was untraced, but it had been on the farm for some weeks at least, and the owner's attention was only drawn to it by the fact that one person after another seemed to be affected by it.

This farm had been vaccinated last year, and the cases which were all re-vaccinated previously had taken very slightly at the last vaccination.

In all, there were seven cases, three coloured females and three coloured males, and one European child of 3½ years who had not been vaccinated well in infancy, and who was re-vaccinated 10 days before the attack, without effect.

All the cases were very mild.

The farm in its entirety was put under voluntary quarantine by the owner, and no guards were appointed.

All the contacts were vaccinated, but without success. However, all with the exception of three had been vaccinated or re-vaccinated about six months previously.

There was no spread of the disease outside the limits of the farm.

This outbreak was under the control of the Divisional Council of Willowmore, who supplied the necessary disinfectant after the discharge of the last case. The farm was under quarantine from March 14th, 1904, until April 13th, 1904, the date on which all the disinfection was carried out.

## 69. STOCKENSTROM.

[Report furnished by the Resident Magistrate, the District Surgeon being absent.]

(a) The water-supply is fairly good and no complaints have been made about any impurity that I am aware of.

(b) Sewerage and Drainage.—These are not satisfactory, but I do not know if the Municipality will be in a position to do anything.

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(e) The disposal of night-soil, slop-water, and household and other refuse is satisfactorily carried out, the Municipal Council having a spot allotted for this purpose.

(d) There are no overcrowded dwellings.

(e) The management of slaughter-houses is well conducted under the supervision of the Chief Constable.

(f) The sale, storage, and preparation of human food is satisfactory.

(g) No swine are allowed to be kept in the village, while cattle are kraaled at the location, some distance from the village.

(h) The only location is the Municipal one just outside the village, which is under the supervision of a caretaker and is well and cleanly kept.

(i) The one cemetery just outside the village is under the control of a Board of five members. It is in a very unsatisfactory condition, the wall round it being in a bad state of repair, allowing animals access to roam about and disturb the graves.

(k) There are no nuisances of any importance in existence.

(l) Hospital Accommodation.—There is only a Contagious Diseases Hospital in the village, owned by Government.

(m) Infectious Diseases.—There have been some cases of Typhoid Fever, or rather Enteric, during the half-year.

At Hertzog, a native adult died from it, while at Buxton and Lushington two European adults contracted the disease but recovered.

These were attended by the doctor as private patients, I believe, and there was, therefore, no cost to the Government or any local body.

There were no cases of Small-pox, Diphtheria, or Scarlet Fever.

There was an epidemic of Measles through the district. No Europeans died, but many native children died from Broncho-pneumonia following the Measles as a complication.

It is quite impossible to trace the number affected.

I have been unable to ascertain the cause of the outbreak of Enteric.

It is gratifying to be able to state that Bubonic Plague has not appeared in this district.

There has been no general vaccination since 1903.

## 70. STUTTERHEIM.

DR. C. MAITLAND PATTISON, ACTING DISTRICT SURGEON..

(a) Water-supply—District.—The district is supplied by numerous streams. The water is of excellent quality, even during the past six months, when little or no rain has fallen the supply has remained fairly good.

Village of Stutterheim.—No alteration in supply has occurred since rendering of last report. It is to be hoped that the Municipal Authorities will in the very near future find it in their way to lay down piping for the purpose of supplying the village; the present system of supply by open furrow is open to obvious objections.

(b) Sewerage or Drainage.—Nil.

(c) Collection and Disposal of Slop-water, Night-soil, etc.—The pail system answers well. As regards the suggestion in last year's report *re* the disposal of slop-water and night-soil, I am not aware that the Municipal Authorities have taken any steps in the matter. I would again draw this matter to their notice.

Household and Stable Refuse, etc.—This is removed by Municipal Scotch cart weekly.

(d) Overcrowding and Dwellings unfit for Human Habitation.—Nil.

(e) Management of Slaughter-houses and Butcheries, etc.—The slaughter-houses, two in number, are situated outside the village about a mile distant, and in my opinion are kept in proper order. Bakeries are well conducted. There are no recognised dairies.

(f) Sale, Storage and Preparation of Human Food.—Our sole manufacture is soda water. The weekly market continues to supply the residents with vegetables, etc.

(g) Keeping of Cattle, Swine and Other Animals.—During the past six months I am glad to say the number of cattle, swine, etc., kept within the village area seems to have diminished.

(h) Native Locations.—Six in number: Ceynu, Emgwali, Waterburg, Keilands, Kijibes and Bullsrun. The first three are self governed, the last three being



under the control of a specially appointed Inspector. "Drunks" still continue, but seem to have lessened. The water-supply is good. The sanitation is represented by "nil."

(i) Cemeteries and Burial Ground.—The cemetery is admirably situated and well kept.

(k) Abatement of Nuisance Generally.—A white street-keeper has been added to the Municipal staff during the past year. His presence is an improvement, as the yards, kraals, etc., are more frequently inspected by him than by the native who preceded him. The adoption of some scheme for the disposal of slop-water is still an urgent necessity.

(l) Hospital Accommodation.—The gaol continues to be the only hospital. It is a pity the Authorities cannot see their way to secure a site while ground is cheap on which to erect a small hospital. This in ordinary times could be used for accidents, operations, etc., and in times of need be utilised for infectious diseases. I would suggest that this matter be seriously considered during the next year, and that the Government be approached on the subject.

(m) Infectious Diseases.—During the past six months infectious diseases, I am sorry to say, have been both numerous and varied, compared with recent years. In the village itself four cases of Enteric of a serious nature have been reported, and two of a less serious type. The source of infection was distinctly traced to East London. Five of the cases occurred in one house; the sixth patient was a nurse. Two cases of Scarlet Fever occurred amongst school children. The epidemic of Enteric did not spread; this was due to careful disinfection of all excreta, and the fact that the disease was confined to one family and a lady of the nursing profession goes a long way, I think, to prove that the disease was imported from East London, and not due to any irregularity in our local sanitary arrangements.

An outbreak of Small-pox also occurred in the Mission Location of Keilands. This was confined to three natives. With the aid of the missionary I was able to isolate these cases. Vaccination was extensively performed, and I am glad to say the disease did not spread amongst the numerous population.

The source of the outbreak was traced to the Queen's Town District. The Small-pox was of a very severe type. The cost of the outbreak was about £15 15s.

Mortality corresponding with recent years, I am pleased to state has not been heavier. No deaths occurred from Enteric, Scarlet Fever or Small-pox. Phthisis accounts for the greater number of deaths amongst natives. A good deal of this disease occurs amongst the civilised natives. This may be due to change of food combined with immorality and inebriety, but the change from the blanket to semi-European clothing appears to me to greatly forward the disease, especially in rainy weather, when a change of clothing is not available. I am informed by the Rev. Dr. Bester, who has had about forty years' experience, that Phthisis amongst the "raw Kafir" was almost unknown about twenty-five years ago.

Amongst the white population a large number of the deaths occurred in infants. The cause in most cases was Infantile Diarrhœa. During the past six months the village has increased considerably, and it is gratifying to see the improvements in design, sanitation, ventilation, etc., adopted in the lately constructed houses. On the whole, I think the general cleanliness, etc., of the village have improved since last report.

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## 71. SUTHERLAND.

DR. R. H. H. HAYDEN, DISTRICT SURGEON.

(a) This village has an extensive supply of water, so much so that gardening is carried on to a rather considerable extent. The water-supply is derived from wells and dams, and some few persons collect a small quantity of rain water from their housetops.

From one dam the water percolates through the subsoil and comes to the surface lower down in the form of a spring where the water is collected and brought to the village a distance of about twelve hundred yards in an iron pipe, which delivers the water into a cement reservoir, where it is collected and used for gardening purposes. Some persons take the water from the pipe where it flows into the reservoir and use it for domestic purposes. This water is of rather good quality.

There is another large dam about half a mile from the village, but the water from this dam, when it has any, is only used for gardening, and is brought to the



village in an open furrow. During the half-year which this report covers there was no water in this dam.

Most people get water from wells for domestic purposes. So far as I am aware all these wells derive their water-supply from under the bed rock through drill holes, but, although the water is probably good when coming from under the bed rock, still it is subject to contaminations in the wells where it collects and into which surface water percolates and dust falls freely, as very few wells are covered with anything which could be called a dust-proof cover. These wells or pits are often very dirty, and contain a large quantity of sediment, formed from dust blown into them, as well as pieces of wood, tins, buckets and ropes, etc., which fall in when water is being taken out by other means than a pump.

The water from these wells smells strongly of sulphuretted hydrogen, and is unpleasant, therefore, to drink, but after being exposed to the air for a few hours the unpleasant smell disappears, and is then not unpleasant to the palate.

Formerly there were some shallow wells in the village, but these have all been transformed into deep wells by putting a drill hole in them down to the water bearing stratum below the bed rock, which stratum varies in depth from about twenty to one hundred feet.

There is no doubt but that if the wells were masoned out from the bed rock to a foot or so above the surface with some water-tight lining, and then covered with dust-proof covers, it would prevent contamination from percolation of surface water and dust.

The habit of taking water from wells with buckets and all sorts of utensils ought to be discontinued.

Water collected from housetops into tanks when it rains is also liable to be full of all sorts of germs which may collect in the dust in gutterings and on roofs in dry weather.

There is a spring in the veld not far from the location, and here the natives get what water they require.

(b) Sewerage and drainage are altogether absent in this village.

(c) These matters, *i.e.*, night-soil, slopwater, and household refuse, are a disgrace to any civilised community which is supposed to be taken care of by a Municipal Council. Night-soil is removed by one or two old natives, who get employed to empty a privy whenever the owner thinks well to do so, and for which he pays anything from a small quantity of brandy to one shilling to the native for such services. The night-soil buckets are emptied at a suitable place below the village; they are emptied into a large trench which is filled in when nearly full and a fresh one dug. Now, if all persons attended to the cleaning of the night-soil buckets and had it done often in summer it would not be so bad, but when you have people who do not wish to spend any money to have such work done, the consequence is that very often many privies in the village are in a disgraceful state, and as the Local Authority will not enforce their rules and levy a tax which would enable them to have the work done by a competent person, you cannot expect the closets to be kept as they should be.

Again, there is no Sanitary Inspector, so there is no one to see to such matters. In my opinion, it is not sufficient that buckets should be emptied once in fourteen days in summer, and yet fourteen days is the period stated in the Municipal Regulations at which such work should be done at least. I also think that all such privies should have some sanitary preparation, as chloride of lime or carbolic powder in them in warm weather, when there are myriads of flies and bad smells.

Slop-water is thrown in the wards or in the streets when a house or tenement has not got a yard and faces the street. This habit brings many flies in summer, and, therefore, may be the means of spreading disease.

Household and other refuse is collected in bags or in heaps in the yards, where it very often remains either until the owner can get a favourable opportunity to have it taken away cheap, or until he gets ashamed of it, and has it removed to the veld.

There is also another difficulty with reference to night-soil, and that arises from the fact that there are so many tenements in the village which are used by the farmers as temporary residences in the village and, when these people (the farmers) come with their families to attend some church festival, or political meeting in the village, it is not one person out of every ten who will enter a privy, but they prefer getting into a nook or corner at night and answering the calls of nature there. The result is that after such occasions the village is in a filthy state.

The real cause of any difficulty which exists in sanitary and other matters in Sutherland is owing to the fact that its inhabitants are a very poor lot from a financial standpoint, the greater part of the population living from hand to mouth; in



fact there are very few householders who could pay a debt of five pounds sterling if called upon to do so. Naturally, people in such poor circumstances object to pay a large tax for any purpose whatever it might be. Then again the Municipal Council, which consists or ought to consist of six members, is often one or two members short, as enough persons who possess the qualifications as being the owner or occupier of property at a Municipal valuation of five hundred pounds sterling, cannot be got to fill the six seats: also such members as are on the Council may be said to be the largest property holders in the place, and they make it a point never to let the taxes exceed one penny to one penny and a half per year on Municipal valuations, which is a very low valuation in Sutherland, for should these Councillors impose a large tax they well know that the lion's portion would come out of their own pockets.

(d) In houses occupied by whites I do not know of any which are overcrowded or unfit for human habitation, but amongst the coloured people, especially in the location, I believe many huts are very overcrowded, and from the fact of the walls and roofs being so low may be said to be unfit for human habitation, as several houses are not more than about five feet high and are often devoid of fire places and windows. With reference to this overcrowding, I wrote to the Municipal Council the following letter in September last.

Sutherland,  
8th September, 1903.

The Chairman and Members, Municipal Council, Sutherland.

Gentlemen,—

Some months ago I drew your attention to the overcrowded state of the native location, and Mr. Vlock, Mr. Immelman, and myself visited the said location at your request and measured each dwelling, numbered them, and put the number each dwelling ought to accommodate on each house. We also told the occupiers of each house what alterations they ought to make in the way of enlargements, etc., etc. Mr. Vlock kept a copy of such recommendations.

So far I can see no improvement has taken place, and this overcrowding is, in my opinion, one of the greatest causes of so many deaths occurring amongst the inhabitants of the location.

This overcrowding may also breed disease, which may spread to the inhabitants of the village.

Something ought to be done to get rid of the pools of dirty mud which are almost stagnant in the river below the hill on which the location is built.

I have the honour to be,  
Gentlemen,

Your Obedient Servant,

(Signed) R. H. H. HAYDEN,  
Health Officer.

The above letter, like everything else, was taken no notice of by the Council, and the overcrowding remains about the same as it was on the day the letter was written.

At the different periods throughout the year when numbers of the inhabitants of the district congregate in the village for various purposes, there are several of the temporary tenements occupied by them very much overcrowded, but this is only for two or three nights at the time.

About the month of February last I again brought up the matter of overcrowding in the location to the Local Authority, and made some suggestion that they ought to have carried out. In brief, the suggestions were as follows: Every house or other place used as a human habitation to have at least three hundred cubic feet air space for each dweller therein, the roof to be at least seven feet above floor in lowest place, the floor of the dwelling not to be lower than the road or street, etc., outside: each dwelling to have a fireplace and chimney, and each compartment to have a window of not less than a certain measurement, and each such dwelling to be limewashed at least once per year.

(e) All slaughtering of sheep and goats is done in the veld about half a mile from the village. Sometimes (once or twice a year) when an ox is killed, it is done in the village in some yard.

The butcheries, of which there are two, are fairly well managed, although there is still room for improvement in the way of more cleanliness and cement floors.

Some few persons bake bread for sale, but most persons bake for their own needs.

There are no dairies.

(f) The butcheries might be kept cleaner and be better ventilated.

(g) Some few people keep one or more cows for milking purposes. The calves of these cows and sometimes the cows themselves are kept in yards in the village, but are not in any way a nuisance. Occasionally a householder has a pig or two in process of fattening for table use, but as they are so few they cannot be calculated to be detrimental to the public health.

(h) The inhabitants of the location are on the whole well conducted, and with the exception of an occasional quarrel, the result of drink, one never hears of any disturbance there.

The sanitation of the location is conspicuous by its absence from an artificial point of view, but nature is very good to the location, inasmuch as that the location is built on the steep side of a hill which is of very hard clay, and the result is that everything has a tendency to gravitate down the hillside to the river bed below. Were it not for this natural system of sanitation I fear what the consequences might be as the location is often strewn with human excreta.

In the dry seasons, when the river has not had running water for some time, this dirty matter and some stagnant pools of water and filth make the river bed not an acquisition to the public health; but after a good rain, the location hillside is washed down, and all the filth swept away by the river, which very much improves matters. As stated under section (d) there is very much overcrowding.

(i) Formerly there was one burial ground or cemetery at a little distance above the village. This cemetery was divided into a white and coloured portion, but owing to the large number of coloured persons interred there, and also to the fact that their graves were not always made deep enough and the smell was unpleasant, I pointed out the matter to the Local Authorities who acted on my suggestion and allotted a new piece of ground about threequarters of a mile away from, and on a lower level than, the village for a native cemetery. This new cemetery has been in use since the early part of the year, and it is hoped that in the near future the place where Europeans are interred will be changed to a more suitable position.

(k) As to the abatement of nuisances generally I cannot say that anything has been done. On this subject I addressed a letter to the Local Authority in September last as follows:—

Sutherland,

8th September, 1903.

Gentlemen,—

I wish respectfully to draw your attention to the fact that the summer season is now fast approaching, and as is probably well known to you, Enteric Fever and other diseases due to bad sanitation and impure water are very prevalent in summer and autumn; I would therefore suggest to you that you ought to give every attention to the cleaning of the yards and village generally without a day's delay, and I would also suggest that all wells be cleaned and some disinfectant used in every privy. It is also very necessary that the number of privies should be sufficient for the requirements of the inhabitants.

I have the honour to be,

Gentlemen,

Your Obedient Servant,

(Signed) R. H. H. HAYDEN,

Health Officer.

This letter was handed in, and, I suppose, read and pigeonholed, as nothing has been done and things are to-day much in the same condition as when I wrote the letter.

(l) For infectious diseases there is no hospital.

(m) There have been no cases of Small-pox in this village or district during the half-year January to June, 1904.



The following cases were notified on dates as follows:—

#### ENTERIC FEVER.

Probable date of onset.	Notified.	Race.	Place.	Age.
24-1-04.	1-2-04.	E.	village.	2 years.
12-2-04.	13-2-04.	E.	village.	8 years.
20-2-04.	26-2-04.	E.	village.	30 years.
24-2-04.	26-2-04.	E.	village.	30 years.
3-3-04.	12-3-04.	E.	village.	6 years.
17-3-04.	20-3-04.	E.	village.	27 years.
22-3-04.	24-3-04.	E.	village.	28 years.
20-3-04.	4-4-04.	E.	village.	13 years.
12-5-04.	18-5-04.	E.	village.	4 years.
16-5-04.	27-5-04.	E.	district.	17 years.

#### PUERPERAL FEVER.

12-2-04.	15-2-04.	E.	village.	34 years.
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#### DIPHTHERIA.

2-2-04.	3-2-04.	C.	location.	12 years.
7-2-04.	7-2-04.	C.	location.	10 years.
15-2-04.	19-2-04.	C.	location.	2½ years.
14-4-04.	17-4-04.	C.	location.	5 years.
17-4-04.	18-4-04.	C.	location.	8 years.
9-5-04.	12-5-04.	E.	village.	15 years.
17-5-04.	18-5-04.	E.	village.	4 years.
19-5-04.	19-5-04.	C.	location.	14 years.
20-5-04.	20-5-04.	E.	village.	7 years.
20-5-04.	20-5-04.	E.	village.	16 months.
20-5-04.	20-5-04.	C.	village.	18 years.
20-5-04.	20-5-04.	C.	village.	7 years.
26-5-04.	27-5-04.	E.	village.	30 years.
2-6-04.	2-6-04.	C.	village.	42 years.

I discontinued treating last case of Diphtheria on 10th June, 1904.

With reference to what steps the Municipality took to suppress the above diseases, all I can say is that they took none whatsoever beyond my attendance in the pauper cases of Diphtheria.

I have on very many occasions spoken to the members of the Local Authority about this Diphtheria, and have attended and spoken at some of their meetings to try and get them to do something in the way of isolation of these diseases, but all without avail. Up to the end of 1903 they made some effort by having a guard on any house with Diphtheria in it, but since 1904 set in they have not gone to the trouble of having a guard on such houses. I have often recommended several of the Municipal Councillors from time to time to bring the matter up at their meetings and try and do something in the way of isolating these cases, but they have not done anything. About the end of November the Resident Magistrate and myself attended a special meeting of the Municipality. This meeting was summoned for the purpose of taking steps to suppress Diphtheria which was showing itself from time to time. After a lot of foolish talk and argument on behalf of the Councillors, at last on my suggestion it was agreed that a hospital should be built and a committee of two of the Councillors formed as a building committee.

I accompanied these gentlemen to select a suitable place for a hospital, but although the site was selected, as much as one stone has never been placed on top of another in the way of building the isolation hospital.

When I was well weary of talking to the Councillors as to isolation of Diphtheria, I at length hit on what I considered a good plan, and had a child who was convalescent from the disease brought to my house a few times thinking that this would frighten some of the Councillors into doing something in the way of isolation, etc., etc. Well, as I expected, some of the Councillors got uneasy when they saw the child being brought from the location to my residence. They said to me that I must not do so, but I told them that if they would only have an isolation hospital built and place these cases amongst the coloured population in it, I would be only too pleased to treat them there, but so long as these persons were not

placed in isolation or quarantine that they were free citizens; but all my efforts had no effect, as nothing I could do would get them to act. It is terrible to think of such overcrowding as there is in the location with a few cases of Diphtheria scattered through it, and many domestic servants who are employed during the day in the village, going to the said location at night and sleeping, very often, probably, in a house with a case of Diphtheria, and very often, probably, assisting to nurse the case during the night, and then go to their service early next morning and perhaps in a house with young children.

I am tired of telling the inhabitants the dangers of infection and contagion in these diseases, but all my teaching is like throwing pearls before swine, for when you hear some people say "I am not afraid of a disease" when they are walking into a house with Diphtheria in it, you begin to think that talking is no good, and wish that you had some way in your power of remedying matters.

The Local Authorities have neglected to do their duty in preventing and suppressing outbreaks of disease; they have neglected both the sanitation and cleanliness of the village, in preventing overcrowding and in isolating cases of infectious diseases.

I believe the cases of Enteric Fever were greatly caused by the very dry season we had last summer and the resulting dust, as the cases were scattered all over the village and not confined to any particular spot.

I did not see a single case of Enteric in the location, notwithstanding its overcrowded condition.

## 72. SWELLENDAM.

### (i) SWELLENDAM.

DR. G. J. CHADWICK, DISTRICT SURGEON.

(a) The water-supply is now good, pure, and sufficient, being now led in pipes through the whole village.

(b) There is no sewerage or drainage.

(c) Night-soil is now collected by means of a stercus cart, in closed pails, and buried at a distance from the town. Slop-water, etc., is thrown on the manure heaps.

(d) Overcrowding of dwellings is very rare, and most are in good condition.

(e) Slaughter-houses, butcheries, bakeries, and dairies all well-managed.

(f) The sale, storage, and preparation of human food is well-managed.

(g) Cattle run on the commonage, and swine are kept in sties.

(h) There is no location.

(i) Cemeteries and burial grounds are well-kept.

(k) No nuisances exist.

(l) There is no hospital accommodation.

(m) The half-year ending June 30th has been very healthy, and no epidemic has existed except Chicken Pox, which was very mild. No vaccination was performed during the half-year.

### (ii) SUB-DISTRICT OF BARRYDALE.

DR. A. DUNLEY OWEN, ADDITIONAL DISTRICT SURGEON.

My appointment as Additional District Surgeon in this area only dates from May 1st, 1904.

The sanitary defects of this village are many, and owing to the inertness of the members of the Village Management Board are not likely to be altered. I think if the number of members were to be increased from three to five, it would be to the advantage of the place.

(a) Water-supply.—This is derived from a stream which at its source in the mountains is of good quality and quantity. There are present intestinal bacilli, but I fear this cannot be prevented considering the number of cattle, sheep, goats, etc., at all times in the mountains and veld adjoining the stream. These pollution



effects are nil in running water, and only become capable of producing Diarrhœa, etc., if stored in cisterns, and then the water must have a temperature of 60° F.

Samples of water, however, taken at various times from the water furrows in the village all shewed gross sewage contamination.

The police regulations as regards nuisances should be more strictly enforced.

(b) Sewerage and drainage are unknown.

(c) Night-soil Disposal.—No system is in force: a few houses have W.C.'s, but the majority squat in their gardens or on the veld.

(d) There is a good deal of overcrowding, and many insanitary dwellings amongst the coloured people.

A location should be made at that end of the village furthest from the water furrows, and all coloured people who are not owners of erven should be made to live there, and the present mud and reed huts destroyed.

(e) There are two butcheries and one bakery. All are well-conducted.

(f) There are five shops supplying human food, all well-conducted and clean.

(g) Kraals for cattle, sheep, goats, etc., abound in the village. Some are kept clean, but many are a nuisance from their smell, and drainage into water furrows.

(h) No location is in existence here.

(i) There is one cemetery, which is kept in good condition.

(k) To all my suggestions *re* abatement of nuisances, the V.M. Board replies that the Public Health Amendment Act, 1897, has never been proclaimed in Barrydale, and therefore cannot be enforced.

(l) No hospital accommodation exists.

(m) There was an outbreak of Diphtheria in May, 1904.

The first case was seen by me on May 2nd, and I traced the source of infection to Montagu; the man of the house having come from Montagu with his wagon, and having suffered from a bad sore throat there.

His wife and all the children had "bad sore throats," but I was only called in at the last, when the youngest child (three years' old) was so bad that the parents thought it would die. This farm is about two hours from Barrydale, and they visited another farm about one hour from the village. Here I had three cases.

These three children attended Barrydale school, going home from Saturday to Monday.

From children living in the village attending this school I had five cases.

I wished to visit the school daily, and order all children with any soreness of throat to be isolated at home, but the Local Authorities refused to allow me to interfere in the slightest way. There were many other children affected, but I was only called in when the parents considered it dangerous.

I would also draw attention to the fact that there was a severe epidemic of Diarrhœa, with bloody stools and vomiting during November and December last, and I fear a recurrence if immediate steps are not taken to improve the quality of the water-supply.

### 73. TARKA.

DR. WM. H. FERGUS, DISTRICT SURGEON.

(a) Water-supply.—(1) Of town: At present this is in a state of transition; extensive alterations are in progress which it is hoped will lead to an increased supply, both for domestic and garden purposes. Till these alterations are completed it is impossible to speak with any degree of accuracy as to the amount or purity of the supply. During the progress of the work, householders were instructed to boil all drinking water. In addition to the supply from the public fountain, rainwater for domestic purposes is largely conserved in iron and underground tanks, and during the past half-year boring was undertaken on several private properties with considerable success.

(2) Of district: The water-supplies in the rural areas are extremely varied, but of nearly all it may safely be said that the amount has much decreased during the last two or three years, owing to the diminished rainfall. Boring by steam machinery has been extensively carried out, and with a considerable amount of success.

(b) There is no sewerage or drainage system in vogue; storm water is carried by open furrows from the higher reaches of the town to the deep sluit which runs parallel to and below the village.

(c) Night-soil is collected under Municipal supervision. The pail system is in force, and the night-soil is deposited in trenches situated about two miles from the village, and these, when nearly full, are filled up with fresh soil. The disposal



of slop-water and household and other refuse is not under Municipal supervision; the refuse and slop-water is chiefly carried to the dongas adjoining the village, and is there deposited.

(d) Overcrowding is not a crying evil, and if it exists it does not seem to lead to serious consequences. Judged by strictly European standards many of the houses, both of Europeans and natives, would be found wanting.

(e) The slaughter-house is under Municipal control: it is situated at a safe distance from the town and native location; it suffers from an insufficient supply of pure water for flushing and cleansing purposes. Butcheries and bakeries are kept in good order by the owners. Dairies, as such, do not exist, and there are no trades followed which are specially injurious to health.

(f) There is no official check on the sale of milk. As at present in force, a number of householders keep cows in their yards, and sell the milk to their neighbours. This plan seems to answer fairly well. Should infectious disease break out on the milk-seller's premises he receives notice to cease selling till the risk of infection is past.

(g) Cows for milking purposes are allowed in yards and enclosures, but swine and other animals are excluded from the Municipal area.

(h) The condition of the native location is the most serious blot on the sanitary condition of the town. The natives keep their houses in a fairly clean state, but the streets and surroundings of the location are in a filthy and insanitary condition; the public latrines are dilapidated and dirty, and the dongas surrounding and intersecting the location are the receptacles of all kinds of filth and rubbish. The attention of the Municipal Authorities has frequently been called to the condition of the native location, but no energetic measures have as yet been taken to rectify the grave insanitary defects which exist.

(i) The cemeteries are situated at a safe distance from the village, and are kept in good order.

(k) No special measures have been taken for the abatement of nuisances.

(l) A Small-pox lazaretto situated about one and a half miles from the centre of the village is the only provision which exists for the isolation and treatment of cases of infectious disease. It is only for the use of natives; other infectious diseases are treated in the houses of the patients. The Small-pox Lazaretto is the property of the Divisional Council, but is used by the Municipality should necessity arise.

(m) There were no cases of Small-pox during the half-year, and only a very few scattered cases of Enteric Fever and Diphtheria; there was no distinct epidemic of these diseases, nor were there any deaths. No special measures were taken to suppress these diseases beyond the ordinary precautions carried out by the physicians in charge of the cases.

Vaccination in the rural areas is generally carried out during the months of October or November, and, therefore, does not fall within the period under consideration. In the Municipal area vaccination has been seriously neglected by parents; the indifference of the public to the necessity of vaccination is becoming more and more marked as time goes on, and unless a compulsory Act strictly enforced is put into execution, a serious outbreak of Small-pox will be the penalty which the country will have to pay for its indifference.

There has been no outbreak of Bubonic Plague, nor have any special precautions been adopted in this town or district. Rats are found in the goods shed at the Railway Station, but no special steps have been taken for their extermination. One case of Scurvy occurred in the local Gaol; a prisoner awaiting trial for several months became affected with the disease. There was no outbreak of epidemic Pneumonia during the half-year under consideration.

In conclusion, it may be stated in general terms that the public health during the half-year was satisfactory, there being a marked absence of infectious disease, and where infectious disease did appear it was of a mild type. No marked sanitary improvements were undertaken by the Local Authorities, the necessary stimulus, in the form of a severe epidemic, being absent.

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#### 74. TAUNG.

DR. P. T. CAIRNS, ACTING DISTRICT SURGEON.

(a) The water-supply is obtained from a number of wells. During most years the supply is sufficient.

(b) to (k) As in former reports.



(l) There is no hospital accommodation in the district.

(m) There has been no outbreak of infectious disease in the district since last report.

Regarding the general health of the district, there seems to be a fairly high mortality amongst native children. What the prevailing diseases are, it is very difficult to say, as the parents rarely see a doctor, and their description of symptoms is, as a rule, far from satisfactory.

Comparatively few of the native deaths that occur are reported. This is due partly to ignorance, partly to indifference, and it is difficult to suggest a remedy. Were all deaths reported, suspicious cases might be inquired into, and a serious epidemic averted.

The prevalence of Syphilis in this district seems to call for special mention.

As far as I am aware, there are no records on the subject, but it seems that Syphilis has existed in this district since at least 1882. In 1885 it was prevalent to such an extent that the troops with Sir Charles Warren were publicly made aware of the existence of the disease.

Nearly twenty years have elapsed since then, and the disease has prevailed during that time without any check. When the careless habits of the natives themselves are taken into account, one cannot be surprised at the large proportion of the population affected. Some old residents in the district put the percentage of affected at 75. This is, I believe, much too high, but it shows that the disease is extremely prevalent.

With the intention of arriving at some approximate estimate, I visited several centres and examined a considerable number of persons. From these visits, which I am bound to confess were not as satisfactory as I would have liked, on account of the indifference shown by the natives themselves, I have come to the conclusion that probably one-third of the entire native population is affected by the disease in its various forms.

I have merely to point out that the white population of the district depend entirely on these natives for servants; that Kimberley, Cape Town, Port Elizabeth and other large towns, not to mention the adjacent Transvaal, take hundreds as labourers and domestic servants every year, to show that the existence of such a number of Syphilitic patients here is not only inimical to the health of the people of Bechuanaland, but a distinct menace to the health of the country.

The question of treatment is a difficult one. Ignorance and indifference, particularly the latter, and resignation almost amounting to fatalism, are three factors existing here which will have to be reckoned with and overcome before successful treatment, to any extent, results.

The number of patients is increasing every day, however, and they are beginning to recognise the necessity for regularity in taking the medicine, and also the fact that no active disease does not mean cure. The number of patients dismissed as cured is, so far, small, but as the Act has only been in operation here for sixteen months it is too early to expect any results to the extent of cured.

The majority of the patients have improved, and will be dismissed cured in due course.

While the present methods (*i.e.*, out-door) of treating these patients is fairly satisfactory, and is giving fairly good results, there can be no doubt that a Contagious Diseases Hospital is badly needed in the district. The expenses of such a hospital would be great, and no portion of the cost is likely to be contributed by the natives. Still, with facilities for the treatment of patients by inunction, injection into the tissues, etc., the course of medication would not be so prolonged, and better results would be obtained. Again the infective patients would be removed from their homes, thus diminishing the risk of the disease spreading.

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## 75. TULBAGH.

DR. HENRY P. PAYNE, DISTRICT SURGEON.

(a) The supply of drinking water is brought down from a mountain spring by pipes. The quality leaves nothing to be desired, but unfortunately the diameter of the pipes is too small, so that the quantity is not sufficient.

(b) Sewerage and drainage are not provided for.

(c) Night-soil is removed weekly by men employed by the Municipality, as is also household refuse. The slop-water is not removed, but is thrown into the gardens; sometimes, I imagine, into the roads.

(d) I do not think there is any overcrowding, nor are there any dwellings unfit for human habitation.

(e) The slaughtering is done outside of the village, and as far as I have observed the slaughtering houses are kept in a clean condition. There are no large bakeries or dairies.

(g) No nuisance detrimental to public health is caused under this heading.

(h) There is no native location proper, although most of the natives (*i.e.*, coloured people) live together in what might be called a small suburb immediately adjoining the village, and forming part of the Municipality. As a rule the houses here are fairly clean, but, as I have several times advised, the roads should be regularly cleaned up. Refuse and faecal matter are allowed to accumulate to the detriment of the health of the inhabitants of Tulbagh village, which lies on a lower level.

(i) There are two burial grounds which are not, in my opinion, detrimental to the public health.

(l) A small building about half a mile from the village is used for cases requiring to be isolated. It will accommodate four patients of the coloured class, but it is not suitable for Europeans. During the outbreak of Small-pox last year it was supplemented by tents.

(m) No infectious disease of any sort has been observed by or reported to me during the last six months, nor have any cases of Leprosy or Scurvy come to my notice.

## 76. UITENHAGE.

DR. R. G. LAMB, DISTRICT SURGEON.

The health of this town for the half-year ending June 30th, 1904, has been fairly good, and there have not been any epidemics. Typhoid has not been so prevalent as in former years. The sanitation of the town is the same as in last report, as is also the management of all butcheries, bakeries, dairies, and slaughter-houses. I have not had to deal with any cases of either Small-pox or Syphilis, and owing to the fact that last year we had an epidemic of Small-pox, vaccination was carried out.

There has been no vaccination this year, no one having presented themselves for that operation.

## 77. UNIONDALE.

DR. H. MUNRO MACKENZIE, DISTRICT SURGEON.

I stated my views on general subjects at fair length in my report for the calendar year 1903, and I have very little alteration to make for this half-year.

(a) The water-supply remains the same. The rainfall for the half-year was 5.17 inches. In spite of a small rainfall of last year, there has been a sufficient supply in the pipes for domestic purposes, and I prefer to use that water for drinking, rather than tank water, which is more liable to pollution from the dust carried on to the roofs by our south-easterly winds, which prevail all through the summer. I have heard nothing more about the storage dam, which the Municipality was thinking of building.

(b) and (c) Same as last year.

(d) I am sure that there must be some cases of overcrowding in the location, but none have been brought to my notice.

(e) One new butchery has been started during the half-year and seems to be managed as well as butcheries are managed, where there is no official abbatoir.

(f) I have heard of no complaints under this heading.

(g) I have had to complain once or twice of the way in which milch-cows were kept in back-yards, but the nuisance has always been abated.

There has been no improvement in the manner in which swine are kept in the town; if anything, matters are worse, and I have ceased to hope for a change.

(h) The same as in last report.



(i) The English, Dutch Reformed and coloured cemeteries remain the same as when last reported on. The new Jewish cemetery has been enclosed, and is in good order. I have not heard that the coloured community has taken up the new site granted to them, but I should consider that it is quite time that the old one was closed, as it is very crowded.

(k) No abatement of nuisances has taken place as far as I know.

(l) There is no hospital accommodation.

(m) There have been no cases of Small-pox during the half-year.

Six cases of Enteric Fever were reported as having occurred, three in the country and three in the town, with no deaths. I cannot state from whence the infection came.

There was a serious outbreak of Diphtheria, thirty-two cases having been reported as occurring in the country, and one in the town. I may say that all these cases were reported by the medical man attending; none seem to have been reported by the parents or persons in charge, but I have no doubt that there were many more cases which were not reported, as I find that two deaths were reported as occurring from Diphtheria, with no medical attendance.

There were fifteen deaths from Diphtheria, all in the country; so that the mortality was very heavy. The first cases were discovered by me on the farm Dwarsfontein, about nine miles from the town, on January 27th, where I found seven cases in a house containing three rooms and a kitchen, where I believe twenty-three persons were living. There had been one death from Diphtheria before I saw these cases, but the others all recovered. From there the disease spread down the Kamnasie Valley to Smutsdale, Rooi Plaats and Grootfontein, and, I have no doubt, even beyond our border. It was also carried to Hoek Plaats, where there was one case, and to Wanhoop, in the far north-east of our district, by a family which trekked from Smutsdale. At Wanhoop there were four cases, all of which died. The disease seemed to commence in a very mild form, as the first seven cases which I saw yielded to a very simple treatment of a Permanganate of Potash gargle with a mild stimulant infectorant. Later, however, it became very virulent, as the mortality shows, especially at Wanhoop, where I expect that there was no medical attendance until late in the disease, but I got very good results from injections of Burroughs and Wellcome's serum. In all cases I injected 2,000 units at once, without reference to the age of the child, and I found that this dose was quite sufficient, if the case were seen within two or three days from the commencement. In one case, which I saw on the second day, I had to use serum which had been in stock for eighteen months, but I found it as effective as quite recent material, although I believe it is only guaranteed to keep for six months. I was quite unable to find out from whence the first infection came, but I have not the slightest doubt that it was carried through the country habit of visiting wherever there is any sickness in the house. In all cases I warned the parents of the very infectious nature of the disease, but I found that it was impossible to carry out isolation in a proper manner.

Vaccination.—During February and March I vaccinated 1,082 persons at fifteen centres in the district. The lymph was obtained from Grahamstown, but I am unable to give any correct idea as to the amount of success obtained, as no second visit was allowed. I have reason to believe, however, that the results were not very good.

Notice was given twice that I would attend for the purpose of public vaccination in Uniondale (Urban area), with rather less than the usual amount of success, as only 29 persons presented themselves on the first occasion, and none on the second.

Ten persons have been treated under Part II. of the Contagious Diseases Prevention Act, 1885. I would again draw attention to the fact that there must be many more cases unreported, especially on the farms, but it seems to be impossible to impress on people the very serious nature of this disease.

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## 78. VAN RHYNSDORP.

DR. G. W. YOUNG, DISTRICT SURGEON.

Since my last report a Village Management Board has been formed, which is at present busy drawing up their regulations. They have appointed me Medical Adviser and have consulted me with regard to Health Regulations. There will be no material difference, therefore, in this report from the last, but I hope that the next will give much more satisfactory information.

The general health has been good, but sanitation is still bad.

(a) and (b) Remain exactly as last year.

(c) (d) and (e) Also remain the same, but are all being legislated for by the new Village Management Board. I have personally selected the spot for night-soil disposal, and we are promised a very good system. A man has been engaged as a sort of Sanitary Inspector who will watch all closets, dwellings, sluits, and slaughter houses, etc.

(f) and (g) Nothing further to add to last year's report.

(h) To be thoroughly overhauled by Village Management Board

(i) (k) and (l) Nothing further to add.

(m) Two cases of Enteric occurred, one probably originating in town, while the other was infected from it.

There has been no Small-pox or vaccination, and no other epidemic disease has occurred.

## 79. VICTORIA EAST.

DR. W. E. KELBE, DISTRICT SURGEON.

I have nothing to add to or subtract from my report on the health of this district for the year 1903, except to say that notwithstanding the prolonged drought, the health of the people has remained good and remarkably free from infectious disease. There has been no outbreak of Small-pox, the cases mentioned in the returns being only the end of the outbreak of 1903. The vaccination has not been satisfactory, and although I submitted the names of some twenty natives for not having their children vaccinated, more than six months ago, they have not yet been brought up before the Magistrate.

## 80. VICTORIA WEST.

(i) VICTORIA WEST.

DR. T. E. JONES, DISTRICT SURGEON.

(a) The remarks made by me in previous reports with reference to the water-supply of this village still hold good. True, the Municipal Council has spent a considerable sum of money upon the construction of an open iron chute to replace the old stone-built furrow for some distance of its course. This chute, however, receives polluted water, which is still further subjected to the most objectionable methods of contamination along the major portion of its course.

A new supply was referred to in my last report. The matter has been allowed to drop.

(b) Sewerage and drainage.—Nil.

(c) Disposal of Night-soil, Slop-water, and Refuse —As previously reported.

(d) Several cases of overcrowding were dealt with by the Municipal Authorities during the half-year. I know of no cases of overcrowded dwellings at present.

(e) Butchering.—The system is still most objectionable.

(f) I am not aware of anything undesirable with regard to sale, storage, or preparation of human food.

(g) A few cows are kralled in the village, but as far as I am aware, they give rise to no nuisance.

(h) The native location, under the supervision of the Municipal Council, receives careful attention. Still, there is much room for sanitary improvement. Its situation is well without the town, and on the slope of the kopje to the north.

(i) Cemeteries and burial grounds are well-kept.

(k) The Local Authority is energetic in dealing with nuisances.

(l) There is no hospital accommodation for the treatment of infectious disease since the old one was condemned last year.

(m) Nine cases of Typhoid were reported during the year to the Municipal Authority of this village, also one case of Diphtheria and 14 cases of Scarlet Fever, which were of a very mild type; the cases were scattered over the months April to June. It was considered desirable, however, to close down the schools two weeks earlier than they would otherwise have done for the regular June holidays. At that



time, Mumps and Whooping Cough were very prevalent. With regard to the Scarlet Fever, I think many more cases occurred, but were not seen by a medical man, inasmuch as they suffered little or nothing, and were able to be up and about during their indisposition. It was impossible to carry out effective quarantine, of course. There is no hospital provision, which would enable one to carry out anything of this nature.

Four cases of Scarlet Fever were reported from the district to the Divisional Council, all occurring during the month of June on the same farm.

During the summer months of the year, a large number of cases of Scurvy occurred amongst the natives at work on the construction of the Hutchinson Carnarvon Railway. The men had been living on bully beef and bread for some time. The cases were in every respect typical of true Scurvy. Insidious in its onset, the patient losing weight and developing extreme weakness; pallor and swollen gums, easily bleeding and sometimes fungous in appearance; an exceedingly foul and characteristic odour of the breath. Petechial ecchymosis; subcutaneous swellings from hæmorrhages; subperiosteal and articular effusions, oedema around the ankles; subcutaneous and intra-muscular infiltration, producing a brawny condition, particularly of the legs; harsh dry skin; epistaxis and melæna were the most common form of mucous hæmorrhage, and enteritis the cause of death in three cases.

When seen early in the development and placed upon a generous diet, which included plenty of green vegetables and lime juice, the cases invariably made very rapid strides to recovery. When the natives learnt the importance of spending a little more of their earnings on a better and more varied diet—which came to include to include onions and potatoes—Scurvy very soon disappeared from among them.

Public vaccination was advertised to take place once within the last six months in the village, but very few persons put in an appearance at the appointed time and place. Fifty-four children have been vaccinated by me during the months January to June. Outlying centres have not been visited for two years. 120 births have been registered during the half-year; 56 of these were in the village and 64 in the district.

	Town.		District (excluding the Town.)	
	European.	Coloured.	European.	Coloured.
Births	23	33	35	29

The rate per thousand per annum being in case of European, 32  
 " " " " (coloured, 34.

Deaths were registered as follows :—

	Town.		District.	
	European.	Coloured.	European.	Coloured.
Phthisis ...	2	6	...	5
Pneumonia ...	1	27	1	11
Cancer ...	1	...	1	...
Senile Decay ...	...	3	...	4
Bronchitis ...	2	2	...	3
Broncho Pneumonia ...	...	3	1	1
Gastro Enteritis ...	1	14	2	6
Peritonitis ...	...	3	...	1
Enteric ...	...	...	1	...
Marasmus ...	...	1	...	...
Heart Disease ...	1	3	1	1
Hydatid ...	...	...	1	...
Rheumatic Fever ...	...	...	...	1
Tubercular Adenitis ...	...	1	...	...
Syphilis ...	...	1	...	...
Pericarditis ...	...	1	...	...
Hæmatemesis ...	1	...	...	...
Convulsions... ..	...	2	...	...
Pertussis and Pneumonia ...	...	2	...	2
Strangulated Hernia ...	1	...	...	...
Pharyngitis... ..	1	...	...	...
Fractured Spine ...	1	...	...	...
Meningitis ...	...	1	1	1
Hanging ...	...	1	...	...
Pleurisy ...	...	1	...	...
Scurvy ...	...	4	...	...
In Labour ...	...	1	...	...
Dropsy ...	...	...	...	3
Dagga Poisoning ...	...	...	...	1
Pulmonary Abscess ...	...	...	...	1
Anenrism ...	...	...	...	1
Fractured Skull ...	...	...	...	1
Premature Birth ...	...	...	...	2
Dysentery ...	...	...	...	1
Total ...	12	77	9	46

Town death rate	E.	22·241	per thousand per annum.
	C.	97·0	” ”
District (excluding the town)	E.	7·8	” ”
	C.	42·0	” ”

The heavy mortality amongst the natives occurs very largely in children under the age of two years. Pneumonia, Broncho-Pneumonia during the winter months, and Gastro-Enteritis during the summer being the cause of death.

(ii) SUB-DISTRICT OF VOSBURG.

DR. G. B. WILKINSON, ADDITIONAL DISTRICT SURGEON.

(a) The water-supply is abundant, but very impure, due to being open from its source, and animals, etc., fouling it. It is totally unfit for drinking purposes. The fountain should be enclosed and covered, and the water run in pipes.

(b) (c) (d) (e) (f) (g) (h) (k) and (l) Similar to previous reports.

(m) There were no cases of either Enteric Fever or Small-pox. Diphtheria occurred on two farms four hours off, three cases at one farm with one death, and two cases at the other, both of which recovered. All the cases were Europeans.



The health of the district has been excellent, five deaths having occurred during the half-year, as follows;—European; Infantile Diarrhœa, 2; Croup, 1; Diphtheria, 1; Senile Decay, 1.

## 81. VRYBURG.

DR. W. M. NUGENT, DISTRICT SURGEON.

During the past six months the health of the prisoners at the Vryburg Gaol has been excellent. Some cases of Scurvy were treated from the Kuruman district.

(a) The main water-supply is obtained from a fountain; it is of good quality and not liable to pollution.

(b) Sewage is removed some distance from the town. Drainage is worked by stone furrows.

(c) The dry earth system is very efficient, and night-soil is deposited east of the railway line.

(d) No overcrowding has been brought to my notice.

(e) Slaughter poles, butcheries, and bakeries are kept in a sanitary condition.

(f) Stores are efficient.

(g) Several cattle kraals are now in the town, and will probably cause a great deal of Ophthalmia during the summer months.

(h) The native location is south of the town, and in good order.

(i) The cemetery is not liable to contaminate the water-supply.

(k) Nil.

(l) Contagious diseases patients have been treated in hospital.

(m) Several cases of Diphtheria occurred, but were not very virulent.

## 82. WILLOWMORE.

DR. R. J. D'ARCY, DISTRICT SURGEON.

In presenting a half-yearly report for 1904 I have but little information to give. The half-year has been particularly dull and wanting in incident. The general depression seems to have affected even illness; there has been nothing serious to note, either in village or district, during the half-year. In the Gaol we have had but few prisoners, and only two admissions to hospital, one being a Leper.

Under the headings from (a) to (l) I have nothing to add to my report for 1903, to which report reference should be made.

I am not aware of any case of Enteric. One case of Diphtheria came under my care in February. The child (European) was first seen on a farm eighteen miles from the village, and came into the village for treatment. The case was isolated, treated with antoxin serum, and recovered. No action was required from the Local Authority, as the parents of the child were in a position to carry out the necessary arrangements for isolation, disinfection, etc. There was no further spread of the trouble.

Small-pox was discovered at the farm Welbedacht, seventeen miles from the village, on January 8th. The infection came from an adjacent farm. The patients numbered five, all European, one adult and four children. The adult had been vaccinated twenty years previously; he had a very severe attack of confluent Small-pox. Of the children, one eight years of age had been vaccinated five years previously, the remaining three were not vaccinated until after they were exposed to the infection. The vaccination took well in all three cases, and the Small-pox eruption was limited to a few pocks. All the patients recovered. They were isolated at the place of outbreak, and two guards were appointed. The Divisional Council acted as Local Authority, and everything was done to limit and control the outbreak. Seven persons were kept under surveillance and vaccinated. The last case was discharged on February 28th. Vaccination was performed on 1,278 people. Second visits not being made to its different centres, it is impossible to estimate the successes, but, as far as I can judge, the lymph was active and good.

There is nothing further calling for comment during the half-year.

## 83. WODEHOUSE.

## (i) WODEHOUSE.

DR. E. R. ROWLAND, DISTRICT SURGEON.

The health of the district and town has been fair for the past half-year. During the first three months we had thirty-seven cases of Enteric Fever, including six cases in the district and four natives.

(a) The water-supply has been good, although not abundant.

(c) Night-soil and other refuse are removed by carts and deposited at a good distance from the town.

(d) To my knowledge there are no dwellings overcrowded or unfit for human habitation.

(e) Butcheries, bakeries, and dairies are kept in good order, and in sanitary condition.

(h) The town location is under the control of the Municipal Authorities, and is kept in a fairly sanitary condition.

(i) The cemetery is in good order.

(l) There is a galvanised iron room at some distance from the town, measuring about 14 feet by 10, for the purpose of isolating cases of Small-pox.

(m) There have been, so far, a few cases of Diphtheria, but not of a virulent nature.

There was an increase of Enteric this year on the previous year, when there were twelve cases; the majority of the cases occurred after the rains in January and February.

There have been a few cases of Scarlet Fever in the district.

## (ii) SUB-DISTRICT OF INDWE.

DR. R. J. LOVE, ADDITIONAL DISTRICT SURGEON.

(a) Water-supply.—There is no change since my last report. At the beginning of the year the Municipality sank two boreholes, one on the Market Square and one in the Recreation Ground. The first yielded a fair supply of water, but the second failed to tap any. The Indwe Company sank a borehole in the plantation above the town, but failed to strike water.

Certain individuals sank private boreholes which yielded a fair amount of good water. Up till the end of June no arrangements were made by the Municipality to pump the water from the boreholes in the Market Square.

(b) Sewerage and Drainage.—There is no attempt at either. The gutters along the sides of the streets are unpaved, and are often very offensive from the collection of slop-water in them. One place in particular I should like to call attention to, and that is in Tilney Street, where the slop-water from the Indwe hotel is allowed to flow into the gutter; sometimes in the hot weather a most obnoxious smell arises from this place.

(c) The disposal of night-soil, slop-water and refuse remains the same as last year, in spite of my recommendations in my special report on the outbreak of Enteric Fever.

(d) A few of the houses belonging to poor whites are overcrowded.

(e) The butchers' and bakers' shops are well managed and cleanly kept.

There are no dairies properly so-called. The mineral water factories are cleanly kept. There is no slaughter-house, but one is badly needed. Most of the animals are slaughtered on the veld near the town, but a few are still slaughtered in town.

(g) Horses, cattle and swine are still kept in town as before. Sheep are kraaled at night in the yards attached to the butchers' shops.

(h) Good order as a rule prevails in the location. It is kept in as sanitary a state as possible, and this is borne out by the low death rate from infectious disease.

(i) The cemetery is well kept and is fenced and planted with trees.

(k) As to abatement of nuisances I would make the same recommendations as last year.

(1) Proper removal of slop-water.

(2) Building of a proper slaughter-house.

(3) Cattle and pigs should be kept in proper houses, and not in open kraals.



(*l*) There is no change in the hospital accommodation since last year.

(*m*) There were no cases of Small-pox.

There were three isolated cases of Diphtheria amongst adults in the town, all of whom recovered. I have dealt fully with the outbreak of Enteric Fever in my special report thereon, so it is unnecessary to do so again.

A large number of cases of Enteric Fever occurred amongst natives in the district, but, of course, it is absolutely impossible to arrive at any definite idea of the number. I believe there were a good many deaths from this disease in the earlier part of the year.

The health of the people employed in the Indwe Collieries was, as a rule, good. There were a number of cases of Enteric Fever and one case of Diphtheria.

## 84. WORCESTER.

DR. D. DE V. HUGO, DISTRICT SURGEON.

(*a*) I have dealt exhaustively with this question in my report as Health Officer of the town, and reference should be made to that report for further detail. I regret meanwhile to state that no improvement has taken place in our drinking water-supply since Dr. Turner officially inspected and reported upon it some twelve years ago. He condemned it then—at a time when a very severe epidemic of Enteric Fever visited the Hex River Valley, as well as all the farms and localities watered by the Hex River. The water pollution is now infinitely worse. The causes have been made clear previously, and need not be repeated. The amount of sickness which can practically be almost wholly attributed to the unwholesome water has been appalling during the last few years. The Gastro-Enteric (exclusive of Typhoid or Enteric) diseases accounted for thirty-four deaths in the town during the first four months of the year, and seven in the district. As the greatest proportion recovered—say at least 90 per cent. roughly—of those affected by this form of disease, a fair estimate can be formed of the amount of suffering caused by the bad water.

Notifications of infectious diseases during half-year ending 30th June, 1904, have been as follows:—Enteric, 32 in town, 3 in district; Diphtheria, 14 in town, 8 in district.

The notifications of Enteric or Typhoid Fever are absolutely unreliable. For instance, six deaths were registered during the first four months in the district, and I find there were only six notifications in that area, three of them being by Dr. Stephens, of Robertson, Resident Medical Officer of the New Cape Central Railways through this district. In the town Dr. Ford notified nine cases, Dr. Van der Merwe seven cases, and Dr. Hill and myself nine cases. There are no returns from two other busy local practitioners. Many of the cases are light, and not easy of diagnosis—they are on the borderland—and though treated with every precaution as possible Enteric cases, they are not notified because the convalescence supervenes before the diagnosis is fully established. Many such patients do not see a doctor at all.

(*b*) and (*c*) Vide previous reports.

(*d*) There has been a very large influx of poor whites—quite a new element in Worcester; and in some instances, which came under my observation, the overcrowding has been very bad. The Authorities found themselves powerless to deal with this new condition of affairs.

(*e*) (*f*) and (*g*) Vide previous reports.

(*h*) The native location is under the control of the Municipality, with satisfactory results.

(*i*) and (*k*) See previous reports.

(*l*) The Contagious Diseases Hospital is the only institution.

(*m*) Vide (*a*) and my report as Health Officer to the town.

With regard to vaccination, I find the Railway employes very tardy in rolling up. Although I made special arrangements for the convenience of these employes I have rarely found any of them turn up. In connection with this matter, I communicated directly with the General Manager some two or three years ago without any result, and I despair of taking any further special trouble in this matter.



## 85. WYNBERG.

## (i) WYNBERG.

DR. H. CLAUDE WRIGHT, DISTRICT SURGEON.

The health of the district has been much on the average as that of preceding years. The chief subjects as asked for in the circular are treated *seriatim*.

(a) Water in urban centres is pure, and protected at its source. It is plentiful in Wynberg, but was not so in Claremont and Kenilworth and Newlands. I received complaints of scarcity at Kenilworth frequently in summer.

(b) Sewerage and Drainage.—Of Wynberg one need say little. Great strides are being made with the drainage works, and before the end of the year we hope to have the drainage works in full swing. At Newlands and Claremont the condition is going from bad to worse, and the satisfactory removal of night-soil, and especially slop-water, is almost more than the Council can cope with. Some parts of these localities are in a very bad condition, and it is absolutely imperative that something should be done at a very short time ahead to avert serious consequences. The difficulties are very great, but they will have to be faced, and the Council itself must be fully alive to its responsibilities, and are no doubt anxious.

(c) The collection and disposal of slop-water, night-soil and other household refuse are similar to that in vogue for years past, but it will become too great to cope with, in fact, has become too great already, and must sooner or later be otherwise dealt with.

(d) Overcrowding is a serious menace to the health of the inhabitants, especially among the Indians, Kafirs, and worse of all, considering they are Europeans, the Jews. These latter, however, are not so bad in this respect as formerly. They arrived in this Colony very poor, and therefore huddled together considerably. They are now all of them well-to-do and rich, though they pretend not to be. They can, therefore, afford all the luxuries of civilisation. I use the word civilisation with pride, for when many of them arrive they are certainly not more civilised than the Indian, an intermarried, enfeebled, race. The freedom and climate have done much to invigorate them. Like Jeshurus of old, they have "waxed fat and kicked," certainly kicked off the trammels of serfdom. I also think they have kicked off the vermin and filth in which they formerly lived, and to which I alluded in my previous reports. They have waxed fat, rich and are good citizens, law-abiding and laying up good store for themselves.

(e) The management of butcheries and slaughter-houses, bakeries and dairies, with the exception of the latter, are all improved. The latter require object lessons. The dairyman thinks he has improved his surroundings and dairies. How far he is from the ideal could only be explained to him did he but visit the old country and emulate it.

(f) Human food is not kindly dealt with. The frozen meat is thrown out of the railway truck on to dirty waggons, and when the load is complete, the men who load the waggon lay themselves full length on the top of the meat, stand on it with their dirty feet or boots. Ugh! it nearly makes one sick to see it.

(g) Cattle and swine are not kept in the towns in any numbers. In the rural districts they do no harm, except to the people who keep them, and many of them appear to like the porker in the kitchen. He still helps to "pay the rent."

(h) There are no native locations or camps under the care of Local Authorities. Better supervision is maintained over the localities where the natives must perforce reside.

(i) The cemeteries near the race course are quite unfit for the purpose, anyone who might chance to be buried alive would soon be drowned, as the coffins have to be placed in water in winter just below the surface of the ground.

(k) We have no special nuisances in Wynberg district to abate, except the oft-regretted nuisance of the deposit of heaps of manure alongside the main thoroughfares in the rural districts. They are a great nuisance. I believe it comes under the Police Offences Act, but the police take no notice. If the District Surgeon had the power to deal with matters like this it would be far better than leaving the incentive to a policeman. The District Surgeon should have the power right away to fine or imprison for these offences. He is surely on the spot more able to judge of the nature of the offence than a Magistrate in a Court who never even sees the offence, but decides after bickering agents have done their most. The one who bickers most usually wins. The offender should, however, have the right to appeal if his conscience did not tell him the District Surgeon was quite right, and he deserved punishment for being a nuisance.

(l) There is no infectious diseases hospital in the district.

(m) There have been no special outbreaks of Plague, Small-pox, or Diphtheria.



## (ii) SUB-DISTRICT OF RONDEBOSCH AND MOWBRAY.

DR. S. B. SYFRET, ADDITIONAL DISTRICT SURGEON.

(a) There is nothing to add under this heading to my last report. The new reservoir on the slopes of the mountain is not as yet completed. There is urgent need for a further supply, especially for the increasing population of "West London" and its neighbourhood.

At the end of last summer there were great fears of a water famine. Fortunately the winter rains came early.

At present there is not much fear of pollution of water during its storage in the reservoirs or during transit. The danger lies in its storage in household tanks.

Practically all wells have been closed in the Municipalities. In West London the chief source of supply is from shallow wells.

(b) There is no sewerage or drainage system in this district, nor is there likely to be any until Government takes the matter in hand.

(c) Since the beginning of the year the Mowbray Municipal Council has undertaken the removal of night-soil free of charge. This is a step in the right direction, and ought to have been done long ago.

Slop-water is removed daily (except on Sundays) from pails, with a capacity of ten gallons, which are placed in the backyards or, in many cases, in the streets. I have known cases in which there has been no removal from Saturday morning until Monday afternoon. The removals ought to be done daily. The Municipality now allows a household to have more than one pail if necessary.

Household refuse is removed on the same system.

(d) The Municipal regulations are stringent on this matter, and several houses unfit for human habitation have been condemned in the past. With regard to overcrowding, I feel sure that there is a good deal of it, both in the Municipality and in West London. It is a difficult matter to bring home to the culprits except by surprise night visits.

(e) The Municipal and Divisional Council officials regularly inspect slaughter-houses, etc.

(f) The same remark applies to this matter.

(g) Swine are not allowed to be kept in the Municipalities.

Cattle sheds attached to dairies are regularly inspected.

(h) Nil.

(i) There is no change to record with regard to burial grounds.

(k) The greatest nuisance in the district is the want of proper sewerage and drainage. Until these are accomplished there will always be a lot of dirty water lying about, causing, in summer at any rate, abominable stench, and those who have to be out at night will always come across the terrible effluvia from the night carts.

Another nuisance is the number of large holes—worked out brickfields—in this district. They contain a certain amount of stagnant water and all kinds of rubbish are deposited in them. Besides the by no means pleasant odour arising from the stagnant water, these holes become the breeding places of mosquitoes, rats, and suchlike vermin.

If there were a sufficient water-supply in the suburbs some of them might be made into swimming baths at a little expense.

(l) There is no infectious diseases hospital in this district. In my opinion, one is required. Although there is very little Diphtheria and Scarlatina here, the fact remains that there is no place to which one can send a case of Diphtheria urgently requiring tracheotomy, or a bad case of Scarlatina.

It is not right to treat cases of Enteric Fever in the wards of a small general hospital like the Rondebosch and Mowbray Cottage Hospital, where there are often many operation cases.

I think a few isolation wards might be built and maintained by the Municipalities in the grounds of the Rondebosch and Mowbray Cottage Hospital. These would be, to a great extent, self-supporting. Nurses might be engaged from the Nursing Institute as they were required, and the cooking, etc., done in the hospital kitchen.

(m) There has been nothing in the nature of an epidemic during the half-year. A good many cases of Enteric Fever were notified in the earlier months—27 in Mowbray and 13 in Rondebosch. Four cases of Diphtheria were notified—three in Mowbray. There has been no case of Small-pox.

I am not a public vaccinator, but I understand that there has been very little vaccination carried out in this district.

In conclusion I wish to bring to your notice the urgent need there is for the unification of the suburbs.



## NATIVE TERRITORIES.

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### 1. TEMBULAND, TRANSKEI, AND PONDOLAND.

(i) ELLIOT.

DR. M. PURCELL, DISTRICT SURGEON.

(a) From a sanitary point of view the question of the water supply of the township is far and away the most important that has to be faced. As mentioned in previous reports there are two main sources of supply, viz.: the river and shallow well-water. The river gets dry nearly every Spring. It therefore fails as a source of supply for two or three months yearly. To better understand the position with regard to the well water, it is necessary to state that the size of each erf for building purposes is 60 by 100 feet. In a great many instances one erf holds dwelling-house, stable, well, and water-closet. Some time ago water was taken from four of those wells situated in different parts of the township. It was forwarded for analysis. The report stated that all the water sent was contaminated; in two cases very much so. The water from one of the wells was being used by a family, half of whose members contracted Typhoid. Judging from the result of analysis, it may be fairly concluded that the other wells in the township are in a similar condition. Unfortunately the use of the well water cannot be dispensed with at present. As a remedy for this state of things, the sinking of a few deep wells deserves attention. The Government recently sunk one in the Square and obtained a good supply of water after going a depth of 75 feet. This well has not been used. It is still closed down. If the Village Management Board could sink a couple of similar wells it would meet the difficulty. When the boring operations were in progress here the Board approached the Government on the subject, but the charges were considered too high. At any rate, if nothing is done it looks as if the township is going to be a home for Typhoid. The water furrow connecting the river with the township would be more correctly described as a filth furrow. It is used as a latrine by the poorer inhabitants. It should be closed up.

(b) Sewerage and drainage are as before.

(c) Slop-water and refuse is thrown anywhere by the poor.

(d) No change since last report.

(e) There are three butchers' shops. One forms part of a tenement house. It is a most unsuitable place.

(f) and (g) As before.

(h) and (i) The native location is badly kept. Filth abounds. The native cemetery is too close to the location. It should be moved to a site at least one mile further away.

(k) There is very little improvement.

(l) There is no hospital accommodation.

(m) Typhoid Fever, Scarlatina, and Diphtheria.—There were ten cases of Typhoid with two deaths. All but one occurred in the township. Children, youths, and middle-aged were attacked. The first case was a relapse. The patient contracted the disease in the Colony. The first symptoms of the relapse appeared on January 12th. The last case began on May 29th, and recovered on June 30th. In one house there were three cases, one in April, one in May, and one in June. Four cases of Scarlatina occurred, all in one house and in children, the cases coming in April and May. There were seven cases of Diphtheria, all in children in the village, and all recovered. The disease was mild. The outbreak began after that of Scarlatina, but not in the same family. In addition, on May 10th, I attended two cases in the country. Both were children, of whom one died. On June 20th there was another death from Diphtheria in the country, the victim being a grown-up female. In April I held a *post-mortem* examination on the body of a native child who died from the disease. In all the other cases the people were white. There was no Small-pox. No vaccination was performed (prisoners excepted). No cases of Leprosy were discovered, and no pauper relief was granted. No Scurvy occurred with the exclusion of the boys working on railway construction works.



It has ceased with a better diet, but will recur again when the food becomes unsuitable. Diarrhœa was prevalent in January, February, March, and April. There were two cases of Cholera nostra in the village in January. Whooping Cough was prevalent in March and April. The outbreak of Typhoid was managed by the District Surgeon. The sanitary measures adopted were the same as those stated in my previous report.

(ii) ELLIOTDALE.

DR. ALBERT DAVID, DISTRICT SURGEON.

(a) (b) (c) (d) (e) (f) (g) (h) (i) and (k) Nil.

(l) There is no hospital accommodation, not even a gaol hospital.

(m) There have come to my notice no cases of Enteric Fever, Diphtheria, or Small-pox. During the four first months of the year an epidemic of Dysentery raged in this district, causing the death of several dozens grown-up people, and of a great number of children. The cause of this was, in my opinion, scarcity and pollution of the natives' water-supply, namely, the water of vleys and ravines, on which most of the natives in this district depend for drinking purposes. This water was very bad owing to heat and scarcity of rain in January and February.

During the month of June an epidemic of Measles went through the district.

(iii) ENGCOBO.

DR. JOHN W. WEIR, DISTRICT SURGEON.

The health of the district has been good. During the first three or four months of the year there were a considerable number of cases of Diarrhœa, Simple Continued Fever and Influenza, but no epidemic. The number of deaths registered was 169. Arranged according to age they are one year and under, 40; one year up to five years, 19; five years up to twenty-five years, 31; twenty-five years up to sixty years, 59; sixty years and over, 20. Small-pox appeared in Natal and other Colonies. As a precautionary measure, vaccination was performed at nine centres, the numbers vaccinated being 1,068. The calf vaccine lymph obtained from the Graham's Town Institute has invariably been extremely good, the number of unsuccessful cases having been very few. The sanitation of the village is at present fairly good. An open furrow runs through which is liable to pollution by slops, so that pure drinking water is obtainable only from the rain water in tanks, or from the river below the village. The sanitation of the gaol is attended to, the latrine pails being regularly emptied in pits some distance away.

(iv) MQANDULI.

DR. P. H. WALKER, DISTRICT SURGEON.

No material change has to be reported in respect to health affairs in this district.

The gaol is the only building that can be called overcrowded and ill-ventilated.

The mortality from Dysentery among children was very heavy in the first months of the year, and accounts for the unexpected lowness of the census, in my opinion.

(v) PORT ST. JOHN.

DR. THOMAS QUERNEY, DISTRICT SURGEON.

(a) The condition of the water supplies remains exactly as it has been during the past three years. Owing to the excessive drought, tank water failed comparatively early in the year; the wells in the vicinity of the fore shore, which are not influenced by the rains, remained in their former brackish and unpalatable condition; while of the few springs in the village, all save one succumbed to the drought, the survivor providing a fluid whose solid contents varied with the number of feet that had trampled the outlet. This spring, which opens out in the bush at the foot of Eagles' Nest, and some 100 yards north of Westgate Street, has during the whole drought maintained a small but steady flow of water suitable for drinking purposes when filtered, but which, owing to the trampled condition of the "eye"—it has been the only watering place for cattle—showed, on drawing, a



deposit of solid matter that varied from 7 per cent. to 18 per cent. The filtered product is a good water free from objectionable impurities, and gives on analysis but two degrees of hardness, with a trace of iron. At present the spring is open to contamination by cattle and the unclean buckets used by the servants; with the "eye" well cleaned, the surrounding bush cleared, and a suitable wall built enclosing the outlet, the village would be supplied in times of drought with sufficient pure water for domestic purposes, and at ordinary times with a water that is in every way preferable to the brack product of the wells. Of the three wells mentioned in my last report, the closure of Nos. 2 and 3 was recommended. Up to June 30th they still remained *in statu quo*, their contents being increased by numerous tins, stones, and snakes. No. 1 has been completely covered in and a large pump fitted, the use of which abolishes most of the sources of pollution previously mentioned, but I have no hesitation in condemning this water for use in the preparation of food and for drinking purposes, several analyses this year showing that its characters vary in the merest detail from those given in my last report. The crude fluid drawn from wells that lie within 100 yards of the high water mark, is not a desirable beverage for European consumption. In the majority of instances the tank or rain-water is sufficiently wholesome. Some provision should be made by householders for draining away the first rain-water that falls after a drought, containing as it does the sweepings that have accumulated on the roofs and in gutterings. If the roofs and gutterings were kept well swept during dry seasons, and the first rains allowed to wash the parts well before attempting to fill the tanks, there would be less Epidemic Diarrhæa and Gastro-intestinal Disorder than at present obtains. An annual flushing and scrubbing out of all tanks is at present a much neglected mode of procedure that would provide us with the purest of water at a minimum cost.

(b) There is no system of sewerage, while the rainfall of the past six months has been insufficient to maintain the few drains there are as such. The creek, through the cutting off of its supplies, has practically ceased to flow, the outlet into the river being blocked by sand drift, and communication only occurring through the inrush of water at spring tides. In two instances, low-lying erven in the village have been raised, but until the greater portion of the erven are raised, efficient drainage will be a matter of no small difficulty. My remarks on this subject last year are equally applicable now.

(c) Night-soil is dealt with as before by a contractor, who attends to its burial on the shore, though many of the householders do not avail themselves of his services. Slop-water and household refuse are as a rule deposited on the nearest convenient spot, very few of the householders keeping pits for the purpose. On low-lying ground such as this is, where drainage is both primitive and ineffective, the indiscriminate disposal of slops and refuse at present in vogue calls for a remedy. The heaps of rubbish lying in the bush in the village grow daily higher and more offensive, and in addition to other more serious possibilities, serve to provide the village with the swarms of flies that are becoming pestiferous. The surest remedy for the difficulty is to destroy the scrub and bush in the village itself, and thus abolish the screen that is at present afforded by this otherwise useless undergrowth. Householders could then dig their own pits on their own premises, or arrange with the night-soil contractor for the removal of the refuse, or public pits might be made outside the precincts of the village; but as long as there is bush in the village the nuisance of these rubbish heaps will continue.

(d) Overcrowded Dwellings and Dwellings Unfit for Human Habitation.—There are none such within the meaning of the term.

(e) The slaughter-house is managed as well as heretofore, and needs no further comment. The butchery is becoming time worn and needs more constant attention. The blocks, hooks, and knives are well attended to, but the walls and building generally would be benefited by more frequent cleansing and whitewashing.

On March 25th a piece of sheep's liver was handed to me which was found to contain a small tape worm. As the liver had already been sliced and the worm more or less mutilated, it was impossible to obtain a complete specimen. The portions found were, however, sent to the Bacteriological Institute, Graham's Town, for recognition, but the worm was unknown. No other specimen has since come to hand. The sheep from which the liver was taken was one of a flock that came from the Bomvana country, and had grazed for a few days on a farm close to Um-tata before ultimately being driven here.

There is now but one bakery—that in connection with the butchery. There is but one thing to add to my remarks of last year, i.e., that the water from well No. 1 is not a suitable one for the making of bread. The other materials used are sufficiently good, but the brack water imparts to the finished loaf a taste that is all its own.



The milk supply remains as heretofore—most regular in its irregularity. Such milk as reaches the village is sound, though very variable as to quality; but there are no dairies, and the one or two farmers who undertake the supply of milk have neither the facilities nor the custom to warrant the establishment of a dairy within the meaning of the term.

(f) The sale, storage, and preparation of human food call for no comment.

(g) Neither swine nor cattle are kept in the village. Horse sickness has caused the death of many horses during the past six months, most of the animals dying within 48 hours of the first symptoms. My former remarks on the keeping of horses still hold good.

(h) There are no locations or native camps that call for comment.

(i) I stated last year that the cemetery was "large enough for present requirements, but that there was a considerable growth of grass and weeds on and around the graves." Now that the drought has shrivelled the undergrowth and exposed the surface of the ground, it can be seen that the place is not only not large enough, but is practically full. Numerous interments have occurred from time to time without any headstone being placed to mark the spot, and as time and weather quickly obliterate ordinary surface markings, and as there is neither Board of Management or record kept of any kind, it is no difficult matter in digging a new grave to open a portion of an old one. In many places the surface is smooth and shows no indication whatever of the remains that lie beneath, and as formerly pointed out, seeing that the cemetery lies on sloping ground that drains on to one of the public washing pools, its early closure is most desirable. I would suggest that the Resident Magistrate be approached with a view to obtaining a new suitable site from Government, and that a Cemetery Board be appointed to carry out the details of management.

(k) Nuisances do not tend to diminish. The drought has temporarily abolished one—the water lying on the erven—but that will return with the rains. The rubbish nuisance has increased and needs serious attention. The bush in the village is also used for defæcation by the natives, and as there is no attempt at burying evacuations, the condition of some of these spots is better imagined than described, and the practice has evidently become so little thought of amongst them that at times they will go even further and commit nuisances in the main thoroughfares, in full daylight.

(l) There is no accommodation, either in the district or village, for any kind of sickness, or for coping with any infectious diseases that might arise. This is a matter that calls for very serious attention from the community, who in the event of an infectious epidemic would at present be the greatest losers. Any temporary building, however small, would be better than nothing, a room or two that could be utilised for hospital purposes at a moment's notice, and sufficiently remote from other buildings, to ensure complete isolation. One cannot lay too much emphasis on the necessity for such accommodation, more particularly as our numbers are steadily on the increase.

(m) No cases of infectious disease have been seen up to date.

With regard to Bubonic Plague, the only precaution taken is that of examining both crews and passengers arriving at the port in vessels that do not show a clean bill of health. There is no provision made for dealing with any cases that might be discovered, a fact that emphasises the necessity for an isolation camp. Rodents of all kinds thrive without restriction, and as there has been no organised destruction carried out, their present numbers must be very great. In general, the health of the port and district has been good, so far as one can ascertain. Infantile Scurvy has amongst the natives been very much in evidence, however, most of the children dying because instructions are rarely carried out. *Tæniæ* and *Ascarides* we have always with us, and though there was no *post-mortem* examination held during the whole of the past six months, I am yet to open the native body that is free from tape worm.

(vi.) ST. MARKS.

DR. W. O. R. ARNOT, DISTRICT SURGEON.

(a) The main water-supply to the village is still an open water furrow, which remains unflagged, muddy, and exposed to the pollution of horses, cattle, pigs, sheep, dogs, and, in fact, any animal that may be passing through, or roaming at large. The furrow water, owing to the above pollution, is only used for gardens and washing, while rain water, caught in iron tanks, is used for drinking and culinary purposes. There is no Local Authority with the exception of the Resident



Magistrate, who occasionally gets the furrow cleaned by prison labour, but who, of course, can do nothing towards getting the furrow flagged and protected from pollution by animals.

(b) Nil.

(c) A few of the householders have sanitary pails, which are emptied once a week by paid prison labour, but the majority, including the two local hotel proprietors, have the ordinary dug-out privies, which are likely to be a source of danger in the future.

Slop-water, household and other refuse are thrown into dung-pits, and used later on as manure for gardens.

Only one place, a so-called coffee shop in the middle of the village, might be considered overcrowded and unfit for human habitation.

(e) and (f) Satisfactory.

(g) There are two kraals in the village, one being the "Schut" or Pound; these should not be allowed.

(h) There is no native location properly so-called, with the exception of the Native Police Camp, which is well out of the village and well conducted.

(i) The cemetery is well laid out and managed.

(k) Nil.

(l) There is no hospital accommodation.

(m) There has been no Enteric Fever or Diphtheria in the district during the last six months, although last June a suspicious-looking follicular tonsilitis was very prevalent. There have been three outbreaks of Small-pox: the first at Ngila's Location on 8th March, 1904, the last case being discharged on 30th April 1904; the second at Fekentweni's Location on 4th April, 1904, the last case being discharged on 30th April, 1904; the third at Nomkonko's and Mlambi's Kraals on 6th April, 1904, the last case being discharged on 15th May, 1904. All the above outbreaks were in the Qamata area of the district, and were originated by a visitor to Ngila from Glen Grey. There were twenty cases in all, two proving fatal, the latter being due to complications, the result of carelessness on the part of the patients. The disease was of a decidedly mild type all through. No Europeans were infected. All outbreaks were managed by Headmen and the District Surgeon, under instructions from the Resident Magistrate. Each infected kraal was quarantined for six weeks, and all in the infected area vaccinated, while all in the neighbourhood of such areas were vaccinated by the District Surgeon at the nearest store. After the disease had been suppressed the quarantine was raised, and the infected huts were thoroughly fumigated, also the clothing and blankets of patients. All that could possibly be done under the circumstances to suppress and prevent the spread of the disease was carried out.

In a thickly populated native district it is almost impossible for the District Surgeon while out vaccinating to give all details (*e.g.*, sex of children and whether prevaccinated or not), as the people crowd up in such numbers, and are so intolerant of any sort of discipline that the vaccinator can only take note of numbers and whether the candidate is either more or less than ten years of age. Often this work is done after a long ride, and sitting outside a native store with nothing but an old packing case to rest the material on, and exposed to wind, heat and dust for hours. Only the approximate success of vaccination could be ascertained from Headmen and the storekeepers at whose places the vaccinations had been done, as summoning natives for inspection on the eighth day would have entailed considerable additional expense, and would still have given only an approximate estimate.

Only some 244 people were vaccinated during the six months, and of these a very large percentage appear to have "taken." The expense incurred by Government in connection with Small-pox during the six months was £21 18s., this sum including vaccination and the quarantining and visiting of infected kraals.

No Bubonic cases have appeared in this district. Measles have been prevalent in this district and the Territories generally for some months now. It has been of a rather virulent nature, and has caused several deaths.

(vii) UMTATA.

DR. ROBERT H. WELSH, DISTRICT SURGEON.

(a) to (l) As in previous reports.

(m) During the half-year ended 30th June there has been no Enteric Fever or Small-pox. There was one case of Diphtheria, and that ended fatally. The patient, about eight years of age, was the child of a member of the C.M.R. who



lived in the town. The arrangements for isolation, etc., were in the hands of the Municipal Authorities, on instructions from the Medical Officer in charge of the C.M.R.. This is the only case there has been in Umtata for several years, and the last case that occurred was a member of the same family, and that also ended fatally. The source of infection could not be traced. When the second case occurred they were living in a different part of the town, fully a mile from the place they were living when the first case happened. Moreover, in the interval the family had been away from Umtata for several years (five or six I think), and had got rid of practically everything they possessed when they left here. They had been several months back in Umtata, and there is no history of contact with other cases.

There has been no Bubonic Plague. Scurvy has not been so bad as last year. Most of the cases I have heard of have been imported from outside the Territories.

(viii) XALANGA.

DR. P. L. CRAISTER, DISTRICT SURGEON.

The categorical replies to the usual queries are quite the same as when last reported on. Naught amended in sanitary matters, nor aught any worse; no progressive movements, all "as we were."

The whole district, including the town of Cala, has passed through an epidemic of Typhoid Fever; the native population has suffered severely. The number of deaths as registered is seven.

From March to end of half-year we have had a widespread epidemic of Scarlatina, as many as six and eight children in one house. This also attacked town and district, natives and whites. There have been some deaths. Among natives cases of death have resulted from want of care on the part of those in charge of the children.

We are now having a run of cases of Whooping Cough, chiefly amongst the children, but a few cases in adults.

A new era has opened to Cala as regards our water-supply. A private firm (Wilson Bros.), travelling with a water borer, has bored in three places in the town, and has succeeded in reaching our underground water lakes, and bringing up supplies of water equal to tens of thousands of gallons per day.

(ix) BUTTERWORTH.

DR. C. PERCY BLYTH WALL, DISTRICT SURGEON.

As in former years, there is still a steady increase in the number of sufferers from Tuberculosis, pulmonary and otherwise.

Measures to check the spread of this disease and to introduce some elementary knowledge of the laws of hygiene are urgently required.

(a) The water-supply generally, remains in the same condition as at the time of my last report.

The Gaol, with the new quarters added, has now rain-water tanks of a total capacity of 3,100 gallons, inclusive of those in the Gaoler's private quarters.

The average number of inhabitants of the whole building is eighteen, and, therefore, a large increase in the supply of water is urgently needed. This could be done either by the erection of a windmill pump on the river, and a large receiving tank at the Gaol, or else, less adequately, by the erection of four 2,000-gallon rain-water tanks at the Gaol.

There is no bath-room, and only a small foot-bath.

(b) (c) (d) (e) (f) (g) and (k) As in my last report. These matters are shortly to be dealt with by the new Municipality.

(h) Native locations are in good order.

(l) There is no hospital accommodation in the district for the treatment of infectious disease. This is urgently needed.

(m) There have been a few native cases of Enteric Fever, and two European cases of Diphtheria, both of which recovered.

There has been no Small-pox in this district.

(x) IDUTYWA.

DR. C. ARMSTRONG LUMLEY, DISTRICT SURGEON.

(a) The water-supply remains in the unsatisfactory state as reported year by year.

(b) Sewerage and drainage do not exist.

(c) The collection and disposal of night-soil, slop-water and refuse are without system or control.

(d) Overcrowded dwellings or dwellings unfit for human habitation do not exist.

(e) and (f) The management of slaughter-houses, etc., and the sale, storage and preparation of food are under no supervision.

(g) The keeping of cattle, swine, and other animals constitutes a nuisance, and has done so for years.

(h) This does not apply here.

(i) The present arrangements of cemeteries and burial grounds comply with the modest requirements of the village.

(k) There has been no abatement of nuisances.

(l) There is no infectious diseases hospital accommodation.

(m) Enteric, Diphtheria, and Small-pox have not, so far as I am aware, existed in the district, and there has been no undue prevalence of any other disease. The general health may be considered to have been about the average.

(xi) KENTANI.

DR. W. GIRDWOOD, DISTRICT SURGEON.

(a) Water-supply.—We have just passed through a period of prolonged drought, no rain having fallen since February, and under such circumstances the water-supply for the village becomes a prime necessity. As pointed out in previous reports, when tank water gives out the villagers are forced to use the water from a spring close by, which is quite unprotected, cattle, horses and dogs having access to it. The native boys who are sent to carry water use the little scrub that surrounds the head of the spring as a convenient place to defæcate in. The water supply, therefore, is altogether a decided danger to all classes of this small community, and with the advent of coffee shops in our midst, it is not likely to be in any way improved. To remedy this state of things the Local Authority, with the help of the Europeans and natives of the village, should erect a fence round the spring. The spring itself should be protected from surface drainage, and all rank growth removed. Supervision is also necessary, and anyone caught committing a nuisance within the fenced area should be tried under the Police Act and severely punished.

(b) to (l) With regard to subjects under headings (b) to (l) inclusive, no material difference has taken place since previous reports.

(m) Small-pox has not been present in the district for over two and a half years. General vaccination of the district has been approved of, and is being carried out.

The general health of the district has been on the whole good, stomach complaints predominating, and no doubt caused by the long drought.

During the half-year twelve Lepers have been examined and sent to Emjanyana.

(xii) NQAMAKWE.

DR. JOHN STRUTHERS, DISTRICT SURGEON.

The health report for the half-year is practically covered by my report at the end of 1903. For the matters dealt with from (a) to (l) inclusive reference should be made to my former report.

(m) Enteric Fever is an endemic disease, and many cases were treated from March 1st to June 30th; eighteen cases to my knowledge terminated fatally. Undoubtedly impure water from vleys is the source of the disease, and that cannot be remedied. Very few cases of Diphtheria occurred. Small-pox did not break out; the native population has been thoroughly vaccinated, but, at least annually, a tour should be undertaken in this district to ensure that young children be vaccinated. A great epidemic of Measles appeared in March, and large numbers of young children died, and up to the present the disease is frequently met with.

During the winter months acute Dysentery was very prevalent, and forty-four deaths were reported, probably not the half of the actual number of deaths therefrom. This is likewise due to the stagnant water of the vleys or pools in the beds of rivers in a stagnant and filthy state.

A few cases of Scurvy from the labour centres have been treated.

There has been no epidemic of Pneumonia.



## (xiii) TSOMO.

Report by RESIDENT MAGISTRATE, the District Surgeon being absent.

The health of the Tsomo district during the six months ended the 30th June last has been generally good. No contagious nor infectious diseases have broken out with the exception of Measles, which was prevalent amongst children throughout the district, but little mortality resulted therefrom.

Sanitation amongst natives is practically unknown, except that which is carried out by that excellent scavenger the Kafir pig, assisted by dogs, which are found at most kraals.

In January, 1904, four Lepers (three males and one female), two of whom were minors, were removed to the Emjanyana Leper Asylum, since when no fresh cases have been discovered.

(a) The Tsomo River is an excellent water-supply, but in drought it has been necessary to prohibit washing of clothes above the entrance of the Lolwana Stream, which is below the village.

There is a pump in the Residency grounds, but the water is too "brak" for use, and the quantity available insufficient for other than domestic purposes.

(b) There is no attempt at drainage nor sewerage noticeable.

(c) Each inhabitant does as he thinks best with regard to the disposal of night-soil and refuse. The community is not sufficient to support a "contract for removal." A site was selected by a late District Surgeon as a depository, but I do not think it is used except by the Gaol necessities.

(d) No overcrowded dwelling has existed.

(e) There are no "shambles," and the one local butcher kills on his allotment. Most of the residents kill their own sheep for their meat supply in the same way.

(f) Human food is not stocked or kept for sale beyond the requirements of immediate demand.

(g) There are a few cattle, sheep and goats kept, at night, within the village, but these are for domestic use.

(h) The Native Police Camp is badly situated; it is fairly clean, but I am contemplating its removal to the left bank of the Tsomo River. There is no location within the village.

(i) The cemetery in use is about a mile above the village and divided from it by a rocky ridge. The new cemetery appearing on the plan of the township is, I submit, badly situated on the Tsomo River bank and above the town.

(k) The abatement of nuisances requires consideration.

(l) There is no local hospital nor any provision for isolation of disease.

(m) No Enteric Fever, Diphtheria, Small-pox nor infectious disease (other than Measles) occurred during this period.

Regarding vaccination, the late District Surgeon has not left any record or data behind on which I can base a report. I believe towards the end of 1903 he made a vaccination tour throughout this district.

The Headmen have been carefully cautioned to report any disease appearing which is unfamiliar to them, especially if disclosing any of the symptoms of Bubonic Plague. Rats and such rodents are a positive pest in the village. Clothing suffers to a great extent by their depredations, and the Residency whilst shut up for five months shows the woodwork eaten by them in all directions. A new tennis net I placed in my bathroom one Saturday had five separate four-inch holes eaten into it by the following Monday morning.

I have not discovered any Scurvy or Epidemic Pneumonia in the district.

## (xiv) WILLOWVALE.

DR. A. LANG KNAPMAN, DISTRICT SURGEON.

Nothing of any interest or note has occurred in the health of the district during the last six months, and my report for 1903 may be taken as representing the present state of affairs.

## (xv) BIZANA.

DR. G. B. THOMPSON, DISTRICT SURGEON.

(a) Rain water and water from an open furrow are used, there being no other water-supply. Only those who have the means of storing rain water enjoy the use of it. Most of the inhabitants, white and black, especially during such a dry sea-

son as the present, have to use the water from the furrow. I believe very occasionally some may send to the river, which being small and abundantly polluted, is not much better than the furrow in the winter season. In spite of the use of the abominably polluted furrow water, even to drinking it unboiled, the residents seem to escape the usual results—epidemics of waterborne diseases.

(b) There is no sewerage or drainage. The water furrow is really the village drain.

(c) There is no collection of night-soil or other waste materials. The dry-earth system is being employed more I think than before, though still, some cess-pools are, I believe, in use. Slop-water is thrown wherever handiest in many cases; consequently there is generally some corner about dwelling places which smells unsavourily. As to household and other refuse, the usual plan is to throw it anywhere, over the garden wall, etc., so that in public places one meets collections of unsightly rubbish which smell. It also seems to be considered a legitimate thing after shooting a neighbour's dog or cat to toss it outside of one's ground and leave it for the public benefit or otherwise. From time to time in and around the village one's nostrils are offended by the horrible odour of some decomposing carcase.

(d) I have had to condemn huts which were near the gaol and which alone were available for the use of the gaoler and his family. They were dark, damp, and most unwholesome. There are possibly others, but it has not been part of my duty to inspect buildings. In the district, overcrowding at nights is common in Kafir huts, and many huts are anything but sanitary.

(e) No inspection of slaughter-houses, butcheries, bakeries, or dairies is ever required.

(f) No oversight is exercised except in gaol, where good food is supplied.

(g) Cattle and swine are kept, and at distances from dwellings, which commend themselves to the owners, and in a manner to please themselves. As far as my private observation goes, I cannot in many cases consider either the distances sufficient, nor the manner sanitary to animals or people.

(h) The presence of natives in the village—each one following his own inclinations—I consider a danger, especially where, as is the case here, a camp exists just above the water furrow, into which their night-soil, etc., naturally passes.

(i) The cemetery is in a suitable position.

(k) Nothing to note.

(l) There is no hospital accommodation.

(m) One case of Small-pox occurred in the village in May. It came under my own observation first, and was recognised and isolated in a tent upon the commonage about a mile from the village. Happily no extension occurred. The residents in and around the village were vaccinated, and a watch kept upon those who had been in contact with the patient. The Local Authority did everything necessary with promptitude, and this helped undoubtedly to prevent extension. One guard was employed and did his work on the whole well. The patient was a native who had been sleeping in a place where Small-pox patients were, in Umzimkulu district. The patient was unvaccinated, but developed a mild form of the disease, and was able to be disinfected and discharged within a month. It is impossible to give results as to vaccination as I do not see the vaccinated again, except in the cases immediately about me. Some of these developed pocks, others did not.

No other Epidemic Disease has occurred in the district to my knowledge.

#### (xvi) FLAGSTAFF.

DR. JOHN C. PALMER, DISTRICT SURGEON.

(a) The condition of the water-supply has somewhat improved since my last report. The furrow supplying the village has been cleaned out at the part most needing attention. There is still, however, room for improvement in this particular. The enclosing of the erven by wire fences after the recent sale in January last, has tended to diminish the pollution of the stream by stock grazing on the commonage. The rainfall has been below the average during the winter, which was a particularly dry one, but no great inconvenience, however, has arisen from this source. Several cases of Hematuria, chiefly among the men of the C.M.R., have come under notice. The cause was ascribed to the condition of the water-supply in the adjoining district of Lusikisiki, from whence the men were transferred here.



Though the cases were somewhat obstinate at first, they tended to get well gradually. Several men were recommended for further treatment in hospital.

(b) As in last year's report.

(c) No change to last year's report. The stable refuse from the C.M.R. camp is burned.

(d) There are no dwellings overcrowded or unfit for habitation.

(e) No slaughter-houses exist. The one used and reported on in last year's report has disappeared.

(f) No remarks called for.

(g) As in last year's report.

(h) No change.

(i) As before. No deaths have been reported.

(k) A perceptible, if slight, improvement has taken place in this direction.

(l) No hospital accommodation exists. A hospital for the use of the C.M.R. was mooted and tenders called for for its erection, but up to the present nothing more has been heard of the matter.

(m) There has been no outbreak of infectious fever noted. One case of Typhoid Fever, with severe complications, occurred, a white child about 10 being the victim. The case seen in its later stages, however, made a good recovery.

One case of Scurvy, mild in form, was noticed amongst the prisoners in gaol.

No vaccination has been done in the district, though a tour was purposed, but not recommended.

I am still of opinion, however, that this duty should be undertaken, in view of the fact that Small-pox, of a virulent type, to whites especially, was prevalent in Natal during the winter. With free communication across the border, it is easy to foresee how readily it could be carried to, and spread amongst, a large native and but partially protected population.

The general sanitary condition and health of the district remains as before. No deaths have been reported. The few routine duties, carried out by the District Surgeon, do not call for any remark.

#### (xvii) LIBODE.

##### DR. R. ALLEYN BOWEN, DISTRICT SURGEON.

The health of the district has been satisfactory.

(a) The water-supply of the village demands attention. In my last report I made suggestions which would meet the difficulty.

(b) No drainage system exists.

(c) With regard to the disposal of night-soil, etc., I can only repeat that the convicts in the gaol should be told off to empty the closet buckets at regular intervals, as native servants consider this no part of their duties and invariably refuse to do so.

(d) There are no overcrowded dwellings.

(e) Nothing to complain of.

(f) Satisfactory.

(g) No nuisance is created by cattle or pigs in the village.

(h) As far as I know the natives are as orderly and clean as their customs permit.

(i) Nil.

(k) Nil.

(l) In my last report I referred to the want of hospital accommodation, especially as regards the gaol, and made suggestions as to altering this state of things.

(m) No Small-pox has been reported and no Diphtheria. On March 24th I inspected a kraal in Lingatu's location and found five cases of Enteric Fever, all children. I understand that all recovered. As far as I know there was no further noticeable spread of the disease, but there is, no doubt, a great deal of Enteric Fever endemic among the natives, but they do not take trouble to report it and rely on their own method of treatment. I should say it was impossible to isolate a kraal of natives in the raw state, except at the expense of a cordon of police night and day.

Bubonic Plague.—Nil.

I examined and certified two lepers. There are, however, I understand, many more in the district, and this disease is said to be increasing considerably among the natives.

## (xviii) NGQELENI.

DR. J. U. BLACK, DISTRICT SURGEON.

The general health for the half-year ended 30th June, 1904, of the white and native population in the village and other parts of the district has been very good. There has been no epidemic of any kind. Although I have twice reported on the insanitary condition of the closets of the Court House, residency, and gaol, no steps have been taken to rectify the sanitary arrangements.

There is no hospital accommodation of any kind in the village, and when the gaol is full, it is much needed for any sick prisoner.

## (xix) TABANKULU.

DR. W. P. NICOL, DISTRICT SURGEON.

In presenting a report for the half-year on the health of the Tabankulu District, it is a matter for satisfaction that there is very little material from which to make one.

The matter under headings (a) to (k) have been treated of year after year, and there is no necessity at present to modify what has been written in last year's report.

(l) There is no hospital for the isolation of cases of infectious diseases and I do not think that the time has arrived for its establishment amongst the Kafirs. What is much more necessary is a small hospital for the reception of serious cases of injury (accidents, assaults, etc.). It is sincerely to be hoped that when the finances of the country will allow of it, each district in the Native Territories will have a small well-built and well-planned hospital for such cases. Judging from the amount which has been subscribed in some districts towards the Kokstad hospital, I am of opinion that the Kafirs would be found ready to give their assistance.

(m) There have been no cases of infectious disease during the past six months. It is satisfactory to be able to report that a general vaccination of the district has been authorised, a full account of which will be included in the next annual report. During my travels on various duties among the natives I have noticed a large number of very bad cases of Scabies, many of them too bad for home treatment. I have no doubt that some of them have had a fatal ending, and that the existence of a hospital would have enabled a cure to be effected.

## (xx) LUSIKISIKI.

DR. C. D. COOPER, DISTRICT SURGEON.

This report can only be taken as applying to the month of June, as I did not take up my appointment here until May 31st.

(a) The water-supply is drawn from springs and conveyed in open furrows. These furrows, being unenclosed are liable to all sorts of pollution. They empty themselves into the river bed, from which the water supply of the C.M.R. camp is drawn. During the dry season this river consists of a number of semi-stagnant pools, in which the Bilharzia Hæmatobia abounds. Owing to the number of cases of Hæmaturia which I have seen amongst the men of the C.M.R., I reported the matter to the P.M.O of the C.M.R., suggesting that the drinking water should be boiled and filtered, and that the use of these pools as bathing places should be discontinued.

(b) Sewerage and Drainage.—There is no system.

(c) Cesspools and back-gardens are generally used for the disposal of night-soil, slop-water, and other refuse.

(d) There are no dwellings overcrowded or unfit for human habitation.

(e) There are two butcheries and two bakeries. All are well-kept.

(f) The sale, storage, and preparation of human food are all well managed.

(g) Swine are not kept in the village. Cattle, sheep and goats are kraaled within the village area, but sufficiently far from any human dwelling place.

(h) There is no local Sanitary Authority. So far as I have been able to see and to ascertain, all locations and kraals are well conducted from a sanitary point of view.

(i) The cemetery is in good order.



(*k*) Many things could be improved upon, but under present local conditions none of them can be regarded as sources of danger to the public health.

(*l*) There is no hospital accommodation.

(*m*) No cases of infectious diseases have been reported. No vaccination has been performed here for some years, except in the case of prisoners who, in the majority of cases arrive in the gaol with no marks upon them.

## 2. GRIQUALAND.

### (i) KOKSTAD.

DR. A. J. H. THORNTON, DISTRICT SURGEON.

(*a*) The water-supply is conveyed to the township of Kokstad by open furrows and is originally pure at its source, being a mountain spring, but it is exposed to numerous sources of contamination, during its distribution. At the same time, so far no epidemic of serious disease has occurred from this cause.

(*b*) There are no sewers; storm water drains into the water furrows.

(*c*) Night-soil is removed in pails and deposited in holes on the commonage upon a site far removed from dwellings, each night's deposit being covered with earth. Slop-water is generally deposited in the gardens. Household and other refuse is removed to a site upon the commonage set apart for the purpose.

(*d*) Overcrowded Houses, etc.—Such matters are dealt with by the Sanitary Inspector, who reports cases needing attention to me, but none such have come to my knowledge during the period dealt with.

(*e*) and (*f*) Management of Slaughter-houses, etc.—These matters are in a sanitary state whenever inspected by me, and no complaint has reached me regarding them.

(*g*) Keeping of Swine, Cattle, etc.—The supervision of such matters is in the hands of the Sanitary Inspector, and no complaints have been made.

(*h*) Native Locations.—There are none such in the district.

(*i*) Cemeteries.—These are in a good position, relative to the town, and are kept in a neat and orderly condition.

(*k*) Abatement of Nuisances.—No pains are spared in this connection to keep the township in a sanitary state, it being the duty of the Sanitary Inspector and Street Keeper to prevent accumulation of filth upon the streets and private property.

(*l*) Hospital Accommodation for Infectious Diseases.—No such hospital has yet been provided, the only accommodation at present existing being a small wood and iron building which is used for coloured Small-pox cases, and which can take about six cases.

(*m*) Prevalence of Infectious Diseases.—The six months under review have been fairly free from prevalence of zymotic diseases on the whole, but a few cases of Enteric Fever, Diphtheria, and Small-pox were dealt with. All the cases of Enteric Fever, six in number, one coloured and five Europeans, occurred singly; two were imported into the district from Natal, and for the other four no cause could be assigned. The disease appears sporadically during the autumn. Two cases of Diphtheria, both Europeans, occurred and were probably due to deficient ventilation under the houses concerned.

Of Small-pox, twenty-one cases, all coloured, were dealt with. The total cost incurred in dealing therewith was £16 1s. 4d. by the Municipal Council, and £150 10s. 6d. by the Government.

### (ii) MACLEAR.

DR. JAMES H. WHITE, DISTRICT SURGEON.

(*a*) Owing to the collapse of the Village Management Board a scheme for the introduction of a good and plentiful water-supply (suitable for drinking and irrigation purposes) has had to be abandoned. The supply of drinking water from springs has been very limited owing to the severe drought.

(*b*) There is no drainage or sewerage.

(c) Night-soil is chiefly buried in the gardens, and slops thrown out anywhere. Household and other refuse is generally deposited on the veldt immediately outside the garden walls.

(d) None.

(e) (f) and (g) Satisfactory.

(h) The police camp to which I have drawn special attention for the last four years has proved itself a serious menace to the health of the village. I may state the camp is situated above the level of the village and towards that part from which we get our strongest gales. It is situated at the bottom of the gaol garden.

There are no latrines, and up to now there is absolutely no supervision of the place. The police calmly inform me (when I draw attention to any nuisance) that they got this camp from Government, and they look to Government to send the prisoners to keep the place clean. After a rain the stench is anything but pleasant and the gaoler has spoken to me several times of the odour in his quarters, coming from the camp and surroundings. There is a native school and church also at the foot of the gaol garden, at the north end of camp, and this is a rendezvous for all the natives of the village and surrounding farms, twice a week.

We have had several cases of Sore Throat (slight) amongst the prisoners, and one very bad case in the gaoler's quarters (the gaoler's son). These I attribute to the camp, as the gaol and gaoler's quarters are kept scrupulously clean. There has been a case of Sore Throat in a house immediately below the camp, and a case of Diphtheria in a house just across a ravine from the camp.

In no other place in East Griqualand is the native camp placed in a position so threatening to the health of a village, all camps being placed from at least half to one mile out of the villages.

To make matters worse, a large shelter has been erected right in the midst of the camp. The erection of this shelter was protested against by the people of the village through the Village Management Board and by the police themselves, but the Magistrate consulted no one as to the advisability of its being in a suitable position to safeguard the health of the community. The shelter itself is an iron and wood structure, open in its entire length to the strong gales during the winter months. I pointed this out to the Magistrate, but nothing has been done to alter it. The shelter is simply a death trap for people in the winter time.

(i) Cemeteries are in good order.

(k) As the result of the outbreak of Diphtheria, the condition of the village has improved and several nuisances have been removed.

(l) There is no infectious diseases hospital accommodation.

(m) There has been one case of Enteric in the district during the past six months.

One case of Diphtheria occurred, the child of one of the residents in the village. The cause of this was undoubtedly the police camp, as a case occurred there a little afterwards.

### (iii) MATATIELE.

DR. C. ERNEST POPE, DISTRICT SURGEON.

(a) The water-supply from the borehole on the Market Square has been of the greatest service in providing a pure supply of water during the period which has elapsed since the rains stopped. With this exception the water-supply has remained exactly in the same condition as it has for many years past.

(b) to (l) Remarks under these heads in last year's report are still applicable.

(m) In February and March three centres were found in which Small-pox had appeared. Whence the infection was first derived there was no information forthcoming, but it was quite evident that since in Sibi's Location the disease had been rampant for some years, the outbreaks at Rashuli's and Kekani's were merely a continuation of the series, which terminated, as far as is known, at the farm "The Bends," where all the inhabitants had been affected; but all had recovered at the time of my visit. Altogether at these three places there were or had been fifty-four cases, all of a mild type, and without a single death.

During the months of April and May there was an epidemic of Scarlet Fever of a very mild type, which ran its course steadily through every household containing children in the town and neighbourhood unchecked by any precautions it was possible to take. There were no deaths, and no after results of an unfortunate character followed.

With these exceptions, the health of the district has been very good.



*(iv)* MOUNT AYLIFF.

DR. W. P. NICOL, DISTRICT SURGEON.

In presenting a health report for the half-year ending June 30, 1904, I am glad to be able to state that the public health appears to have been good, and that there has been an absence of epidemic diseases among the natives.

Turning to the headings there is very little to add to the statements which have been made from year to year.

(a) During this season the efficiency of the water-supply has had a severe test, and, although there has been a drought practically for six months, the volume of water appears to be undiminished. To one thing I must draw attention, and that is the very filthy condition of the water furrows in the village itself. This, of course, reflects badly on the inhabitants, and I would suggest a more rigorous enforcement of the Police Offences Act, which gives the necessary powers to compel people to keep the water furrows and streets close to their property clean.

(b) to (k) No remarks.

(l) No hospital accommodation exists in this district for the isolation of infectious diseases. It is my opinion that a hospital for such cases would not at present be a success, though the fact that the natives might object to it should not carry any weight. What is really needed is a small hospital for the proper treatment of certain cases of illness and of accidents, assaults and other cases requiring surgical operations. It is, I fear, out of the question for a District Surgeon to run anything like a private hospital for the Kafirs. On the other hand it seems unreasonable that the Government should be expected to provide for and try to save the lives of people who do not think it worth while to pay for their own cure. There is no doubt that a great work could be done among the Kafirs by a small and well-equipped hospital; it is possible that some contribution to medical science might be gained from the cases treated, and it surely would not be impossible to devise some means whereby the Kafir could be made to contribute to the upkeep of such a place. The first step towards all this is for the official mind to get rid of the idea that a District Surgeon wants a hospital entirely for his own monetary advantage. I would strongly urge the Government to give this matter their consideration, and to consult the opinions of the District Surgeons of the Native Territories.

(m) No epidemics of Enteric Fever, Diphtheria or Small-pox have occurred this season.

In previous reports I have drawn attention to the prevalence of Lung Complaints and disorders of Digestion among the Kafirs, and was glad to see the warning given by the Medical Officer of Health for the Colony as to the important part likely to be played by the Tubercle bacillus in the native question in the future.

*(v)* MOUNT FLETCHER.

DR. M. RICONO, DISTRICT SURGEON.

(a) Water-supply.—This, for domestic use, is derived from three boreholes sunk by the Government during last year. The water is pure and sufficient at present.

(b) Nil.

(c) (d) (e) (f) (g) (h) (i) and (k) Same as in previous reports.

(l) There is no hospital accommodation.

(m) There have been no cases of infectious disease during the past six months.

Two cases of Leprosy were certified, and there are several cases of non-examined Lepers at large in this district.

Syphilis is by far the most prevalent disease amongst the Basuto population of the district. In a tribe on the west of the district there is hardly a kraal exempt from Syphilis.

*(vi)* MOUNT FRERE.

DR. R. C. MORLEY HOARE, DISTRICT SURGEON.

I have very little to say in my report, as no changes have taken place during the last six months.

The sanitary defects which I pointed out in my last report continue, and I think are even worse than before.

As I prophesied, Small-pox has broken out again, which I consider due to the fact that there is no systematic vaccination as in other parts of the Colony, but

this I must report on in my next half-yearly report, as the outbreak arose after the 30th June.

(a) The water-supply is very good at source, but as nobody has any authority to deal with it, it is much polluted in its course.

(b) Sewerage.—Nil.

(c) Inhabitants do as they like with regard to the disposal of night-soil, slop-water, and refuse; their ideas of sanitation are very crude.

(d) No overcrowding exists.

(e) The management of slaughter-houses, butcheries, bakeries and dairies is fairly good.

(f) The sale, storage and preparation of human food is also fairly good.

(g) Cattle and swine are kept in the village usually in close proximity to the inhabitants' houses.

(h) The native location is in a fairly good condition.

(i) The condition of cemeteries is fairly good.

(l) There is no hospital accommodation, which is much to be regretted. The previous District Surgeon had an allowance, but allowed it to lapse; this was placed on the estimates by the Resident Magistrate last year, but it was not granted. Numerous cases occur in which if operative measures were taken, life would be saved.

(vii) QUMBU.

DR. E. A. CULLIGAN, DISTRICT SURGEON.

(a) The water-supply is as described in former reports.

(b) There is no sanitary system.

(c) The disposal of night-soil, etc., is left to individual discretion.

(d) No remarks.

(e) Animals are slaughtered on butchers' premises.

(f) Nil.

(g) The keeping of cattle, swine and other animals is satisfactory.

(h) The sanitary condition of locations is as good as can be expected from natives.

(i) No remarks.

(l) No hospital accommodation exists.

(m) Enteric Fever made its appearance again this year, and, as its presence is not reported, I am inclined to believe that it is much more prevalent than is thought. I attended ten cases privately, and on inquiry was informed that the disease was at that time very prevalent in at least two locations. I believe the disease was introduced from the Tabankulu District, though the history of its passage is obscure. When Kafir ideas of sanitation are borne in mind, and the fact that no endeavours are made to suppress the outbreaks, it may safely be predicted that Enteric has come to stay. I have no idea as to the mortality from the disease locally, but the percentage is low.

Although Small-pox has been rife just outside our borders, yet no cases were reported in this district. This, however, is no proof that it did not exist, as, owing to the mildness of the last epidemic, the Kafirs now give it the name of Rashalala, a mild eruptive fever resembling Measles, thereby distinguishing it from Ngqagga, or the usual type of Small-pox. Owing to the low rate of mortality, due presumably to vaccination, the Kafirs pretend to believe that this Rashalala is not notifiable.

Public vaccination was performed at the various centres, but, owing to the tour being arranged during the harvest months, a comparatively small number, viz., 3,753, availed themselves of it. Four centres, however, have yet to be visited. Though no definite information is to hand about the results obtained, private inquiries made in several of the locations have led me to think that there was a good percentage of favourable results.

No cases of Diphtheria have come under my notice.

The increase of Consumption continues, favoured no doubt by many causes, but chiefly, in my opinion, by the results of the too rapid transition from savagery to what is styled civilisation, and the apeing at European clothing and habits.

There were no lepers seen by me during the half-year, but the examination of several is in contemplation. In this district the disease is apparently on the decline.

One lunatic was reported on and removed after the usual delay.



## (viii) TSOLO.

DR. LAURENCE W. POLE, DISTRICT SURGEON.

There has been nothing of note to record regarding the health of the district during the half-year, and my report of last year may be taken as representing the state of matters enumerated under the headings (a) to (l).

(m) Small-pox broke out in four centres, and the total number of cases was seven, none of them European, and five of whom were unvaccinated. No deaths were recorded.

There were no cases of illness from any other infectious diseases.

## (ix) UMZIMKULU.

DR. F. C. SINCLAIR, DISTRICT SURGEON.

(a) The water-supply throughout the district is a very abundant one, and generally pure in quality.

The majority of European householders conserve rain water in large tanks, and use this for drinking purposes, furrow water being used for washing, etc.

(b) No system of sewerage or drainage has as yet been introduced here.

(c) Where tubs are used the night-soil is disposed of by being thrown into the River Umzimkulu (a rather vicious system). Cesspits are, however, more used than tubs. Slop-water, household and other refuse are disposed of in any way that householders may think fit.

(d) No instances of overcrowded dwellings or of dwellings unfit for human habitation have as yet been brought to my notice.

(e) The slaughter-houses, butcheries and bakeries in this district are all under good management. There are no recognised dairies.

(f) Food is sold here in the form of bread and meat, and as mealies to the natives. There is no cause for complaint in the matter of storage and preparation of food.

(g) The keeping of cattle, swine and other animals is under no supervision.

(h) All of the native locations I have visited seem to be kept in good order, and in a sanitary condition.

(i) The local cemetery is well situated as regards the village, and is fairly well kept.

(k) No nuisances requiring abatement have been brought to my notice.

(l) No hospital accommodation exists in this district for the isolation and treatment of infectious disease.

(m) During the half-year I visited forty-one cases of Small-pox (all of them natives), and I have no doubt that many unreported cases occurred throughout the district; out of these forty-one cases three died. In no sense could the outbreak be looked upon as epidemic. Isolated cases of the disease occurred in kraals at wide distances apart, and showed no tendency to spread. Whenever a case was reported and verified as being Small-pox, compulsory vaccination was at once performed, and this, in my opinion, contributed greatly towards checking the progress of the disease.

As regards the isolation of the sick and the surveillance of those exposed to the infection, no provision is made for the setting of guards over infected kraals. I had, therefore, to be content with cautioning the inmates of infected kraals against communicating with members of other kraals until the period of quarantine was at an end.

The steps for the suppression of the outbreak were taken under the authority of the Resident Magistrate, Umzimkulu, and, in my opinion, the Local Authority did everything necessary for the suppression of the outbreak.

Of the forty-one cases of Small-pox brought to my notice, thirty-seven were unvaccinated, four were prevaccinated.

Three deaths occurred out of these forty-one cases, and all of these were unvaccinated.

Of the four vaccinated cases, vaccination had been performed prior to exposure to infection.

In some of the cases the infection seemed to have been conveyed by the movements of natives from the neighbouring Colony of Natal. In others the source of infection was unascertainable.

I assumed duty as District Surgeon of Umzimkulu on the 4th April, 1904, and up to the end of June, 1904, vaccinated 903 persons. The natives in this district submit readily to the operation, and I have reason to believe (although it was impossible to obtain exact results) that the operation was very successful.



The total cost incurred in dealing with the above-mentioned outbreak of Small-pox by Government amounts to £88 3s. 6d.

Several cases of Scurvy have been brought to my notice during the half-year, and I am convinced that this disease is more prevalent amongst natives than is commonly supposed, living as they do usually upon one staple article of diet.

### WALFISH BAY.

DR. THEO. A. MAST, DISTRICT SURGEON.

(a) Owing to the absence of wells or natural streams of fresh water, the inhabitants obtain their supply of water for drinking and domestic purposes from a condenser, supplied by the Government.

This is good, both in quantity and quality, for the needs of the residents.

The water at "Sandfontein," a native location, about three and a half miles inland, where many of the natives reside, is somewhat brackish. This, in combination with the absence of fresh vegetables, scanty supply of meat, inadequate housing and clothing, leads up to the outbreaks of Scurvy, pulmonary diseases, such as Phthisis, Bronchitis, etc., following as a natural sequence.

(b) Drainage and Sewerage.—Nil.

(c) Night-soil is removed by native male prisoners, when available, and, in the absence of this form of labour, by native constables, for which duty they are paid a local allowance.

Slops are removed by native refugee women, who receive food as payment.

In both instances the refuse is conveyed a sufficient distance along the beach to prevent any likely source of pollution.

(d) Overcrowded Dwellings, etc.—The white population residing in the immediate vicinity of the "Bay" are comfortably housed, the buildings, though few, being both commodious and well ventilated. Owing to the continual filtration from the sea, the houses are always somewhat damp.

Many of the natives live at Sandfontein, a location about three miles inland.

I consider the pondok, or native hut, in which they dwell, is simply an apology for the name of shelter, as usually applied to a dwelling for the use of human beings. The framework is covered with old bags, disused canvas, in fact, any material that will give a shape to shelter.

Pulmonary diseases must inevitably follow in the train of such defective housing, more especially when the extreme variation between the mid-day and night temperature is taken into consideration.

(e) Management of Slaughter-houses, etc.—The local storekeepers supply the public with meat. The slaughtering never gives rise to any nuisance, being conducted in a satisfactory manner.

There are no bakeries or dairies.

(f) The Keeping of Swine and Other Animals.—A few horses and donkeys are kept by some of the inhabitants, but they give rise to no sanitary inconvenience.

(h) The good order cleanliness, etc., of the Native Location.—The native location, Sandfontein, is situated about three miles inland. The natives live under very primitive conditions, but, unless they themselves are inclined to improve their position, I do not see how they can be further assisted.

(i) Cemeteries, etc.—The cemetery is situated on the outskirts of the town, about a mile off. It is kept in satisfactory order.

(k) Should any nuisance arise it is attended to by the prisoners. This rarely occurs.

(m) There was an outbreak of Measles. The first case brought to my notice was that of a native child who resided at an almost isolated spot beyond Sandfontein. This case I promptly isolated, but the disease spread, and practically all the white population who had not previously had the disease were attacked. Although there were no deaths caused directly by the disease, at all events amongst the white population, indirectly due to the pulmonary affections so likely to be secondary or aggravated by measles, the outbreak was the cause of a considerable increase in the mortality, especially amongst the young.

Vaccination.—I vaccinated a few natives who were being sent to work on the mines at Port Nolloth, and also three white men. There has been no public vaccination, but this operation has been performed fairly effectively in previous years, upon both the European and the native population.

With regard to Bubonic Plague, there have been no cases. There have also been no suspicious cases of deaths amongst rats.



# Report of the Medical Officer of Health for the Colony.

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## PART III.

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### Reports of Local Authorities.

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Colonial Secretary's Office,  
Local Government and Health Branch,  
Cape Town, Cape of Good Hope,  
2nd August, 1904.

URGENT.

CIRCULAR LETTER.

SIR,—

I am directed by the Colonial Secretary to inform you that the Prime Minister has notified that in future the various Annual Health Reports will be rendered for the Financial instead of the Calendar year; that, to this end, special Reports will be required for the half-year ended 30th June of the current year; and that he will be glad to receive at the earliest possible date for the purposes of the Health Reports to be presented to Parliament, such information as you may be in a position to furnish in regard to the Health and Sanitation of the area under your jurisdiction during the half-year ended 30th June, 1904.

The Report should furnish information on the following points:—

- (1) Water supply; describing the source, whether surface, river, spring, or other; whether the source belongs to or is under the control of your Local Authority, and whether it is situated within or without the area of your authority; by what means the water is collected, stored and distributed; whether by pipes or open furrows; whether the supply is adequate, and whether the water is pure or is liable to pollution.
- (2) The system of collection and disposal of (a) night-soil, (b) slop-water, and (c) household and other refuse.
- (3) The extent to which infectious disease has prevailed, and what steps have been taken both for preventing and dealing with outbreaks thereof, and especially whether any Infectious Diseases Hospital accommodation has been provided.
- (4) What action has been taken to remedy any sanitary defects that may have been found to exist during the year (especially such as the pollution of water, the accumulation of filth and noxious matters, overcrowding of dwellings, and the habitation of any that are unhealthy or dangerous to life), and generally to prevent or limit the occurrence of preventable disease.

- (5) The extent to which rats are prevalent in the district of the Local Authority, the steps taken for their extermination and with what success.
- (6) Is a Health Officer employed by the Local Authority; if so, what are the conditions of his appointment?
- (7) Any other matters relating to the Health or Sanitation of your area which may be deemed worthy of report.

In the event of your Local Authority employing a Health Officer, the above report should be made by him.

I have the honour to be,  
Sir,  
Your obedient Servant,

NOEL JANISCH,  
Under Colonial Secretary.

To the Chairman or Mayor of every Municipality,  
and the Chairman of every Village Board  
or Local Authority under  
Act No. 23 of 1897.

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#### REPORTS OF LOCAL AUTHORITIES REGARDING WATER-SUPPLY, SANITATION, AND IMPROVEMENTS.

NOTE.—These have in most cases been somewhat condensed in order to economise space.

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#### ABERDEEN.

##### ABERDEEN (MUNICIPALITY).

(1). Water-supply.—Aberdeen is supplied chiefly with water from a permanent spring situate within the area of the Local Authority. At the gaol an artesian well has been sunk which furnishes pure water. Rain water is also collected in tanks by many of the inhabitants. There are also several dams in which rain water is stored, the latter serving the needs of livestock.

The water from the spring is collected in an intake-dam, and thence by means of an open furrow is carried to the town. The supply of water is sufficient for domestic purposes and for irrigating, although the owners of water-erven like to have more water at their disposal. Several wells have been sunk from which an average fair supply of water has been obtained. This water is only used for irrigation. The water is impure and liable to pollution.

(2). (a) The tub system is coming more and more into use, and cesspools as soon as they become deleterious to health are disinfected, covered with dry soil and closed.

(b) Slop-water is removed at night to the stercurus pit.

(c) Household refuse is regularly removed.

(3). Since the last report at the beginning of this year there have been reported three cases of Diphtheria and Membranous Croup, and three cases of Typhoid Fever. There is a small hospital for infectious diseases, but in most cases parents prefer to have the members of their families treated under their own roof.

(4). Greater attention has been paid to the speedy removal of carcasses.

(5). Aberdeen has not yet been blessed with a visitation of rats; the smaller rodents—mice—are varied and plentiful.

(6). The Local Authority is without a Health Officer.



## (2) GRAHAM'S TOWN (MUNICIPALITY).

\*Report of Dr. JAMES T. BAYS, Medical Officer of Health.

(1). The source of the greater part of the water-supply is from the Milner Reservoir, where the surface water from a very large area is impounded. There are also springs which augment the supply. The greater part of the catchment area belongs to the Local Authority, and is situated about six miles from the centre of the city, but beyond the area of the commonage. A large dam wall has been constructed across a valley at a spot where the surface water converges, whereby a reservoir is formed. From this, by means of a water tower and some miles of underground piping, the water is either conveyed directly through the mains to the consumer or is stored in one of the reservoirs adjoining the town. There are in all five of these smaller ones, but the quantity of water collected in them is insignificant. The supply is adequate at present for the requirements of the European population, the Milner Reservoir having a storage capacity of 52,000,000 gallons, but as there is a demand for water for the native location, another reservoir is in process of construction about half a mile further up the valley, which is intended to hold a further 100,000,000 gallons. The water is sufficiently pure, the greater part of the area being kept free from human dwellings and grazing beasts.

(2). At the end of next month a system for the removal of night-soil is to be commenced, under which the city will be divided into four districts, each of which will be allotted to a contractor, who will undertake to remove the contents of each pail at least once a week, and oftener if required so to do. A moderate tariff has been fixed.

The slop-water in those cases in which the householder is not able to dispose of it on a garden, is ordered to be removed in carts built for that purpose, and is deposited some distance out of town. The carts are run by various private contractors.

Household and other refuse is ordered to be removed at least once a week, and is carted out of town to one of the four rubbish deposits, where the greater part of the rubbish is burnt. Each householder has to make his own arrangement for the removal of refuse.

(3). During the past six months 38 cases of infectious or contagious disease have been notified, made up of 23 cases of Enteric, 14 of Diphtheria, and one case of Puerperal Fever. Seven cases of illness were undoubtedly contracted in neighbouring districts. All notified cases were investigated by me as to the means of isolation, causation, and the necessary disinfection. An excellent Infectious Diseases Hospital has been provided, constructed on the most approved modern system, and with ample accommodation. The cases of Diphtheria, with one exception, have been of a mild type.

(4). No instances of pollution of the general water-supply have been discovered. A Sanitary Inspector devotes the whole of his time to a systematic visitation of all the houses, with a view to the prevention of filth and objectionable matter being allowed to remain on any premises. Several cases of overcrowding have been promptly dealt with, and numerous alterations and improvements have been ordered and carried out in habitations that are in any way in an insanitary condition. All premises in which infectious illness, and many of those in which there have been cases of tuberculosis, are disinfected under my directions by the Sanitary Inspector.

(5). Systematic and continued efforts have been, and are still being made for the extermination of rats and mice by offering a reward per head for each animal brought to the Municipal stables at a fixed time each day. About 100,000 of these rodents have been destroyed.

(6). I am employed as Medical Officer of Health by the Local Authority at a fixed stipend. My duties are the investigation of all cases of contagious disease, the inspection of travellers arriving from any area which has been declared infected with disease, the inspection of butchers' premises and meat, and of the bakehouses, the superintendence of the slaughter-houses and of the sanitary system of the city, and generally of all matters relating to the public health. I attend all meetings of the Sanitary Committee and act as adviser to the Corporation on matters connected with the purity of the water-supply, the dealing with disease and all hygienic matters.



(7). The mortality amongst the inhabitants of Graham's Town for 12 months has been for the European population at the rate of 15·6 per 1,000, and for the natives 48·4. There has been a decrease of the birth rate for both races, the rates being respectively 25·9 and 38·1 per 1,000 inhabitants, as against 32·7 and 44·6 for a preceding period.

A considerable part of the river bed, hitherto in a most offensive state, has been paved with channelled blocks, a great sanitary improvement has been thus effected. Although further sanitation is required, Graham's Town may be considered as being in a fairly cleanly condition.

(ii) ALICEDALE (VILLAGE MANAGEMENT BOARD.)

(1). There has been no change in the water-supply since my last report.

(2). The system, as reported previously, is continued, and works well.

(3). There have been no cases of infectious diseases reported. No infectious Diseases Hospital is provided.

(4). Where sanitary defects have been found, the Board has called the attention of proprietors to the same and has allowed a reasonable time to have such defects remedied, failing which, prosecutions have followed and defects have been righted.

(5). Rats are non-existent.

(6). No Health Officer is employed.

(iii) SALEM (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—This is obtained in dry weather from a never-failing spring of water issuing from a hillside, and is under the control of the Local Board; another source of supply is rain water stored in tanks with which each house is furnished.

(2). Night-soil and Refuse.—Each house has a W.C., and the dry earth system is in vogue. Refuse is buried.

(3). No infectious disease has occurred during the year.

(4). The sanitary arrangements of this area are good.

(5). Rats are still plentiful in the district, and no steps have been taken for their extermination.

(6). No medical man is employed by the Board, but public health and sanitation are under supervision.

ALBERT.

(i) BURGHERSDORP (MUNICIPALITY).

(1). The water-supply is derived from springs and conveyed in pipes from the source about three miles from the town, but under control of the Local Authority, and stored in a covered reservoir, from which it is distributed by pipes along every street of the town, with leadings to several houses; the supply is ample for domestic purposes and perfectly pure. During last year's drought the inhabitants had their allowance curtailed, but for some time past, the supply being more than sufficient, the streets have been watered at regular intervals.

(2). Night-soil is collected weekly, the tub system being in use, and is disposed of by burial. Slop-water is collected at frequent intervals and conveyed to a considerable distance below the drainage of the town. Stable manure and household refuse are conveyed by cart and deposited outside the town.

(3). There has been no serious epidemic in 1904. Typhoid occurs every year. Notification and consequent prevention of school attendance are the means relied on for checking the usual infectious diseases. Small-pox, when it occurs, is dealt with rigorously.

There is no hospital for infectious diseases, nor is there any prospect of one being formed.

(4). There is no overcrowding so far as is known, nor are there any dwellings that are unhealthy or dangerous to life. In this climate a house is a luxury and not an absolute necessity, and the only crying need of the majority of the inhabitants is fresh air. There would appear to be no law compelling people to ventilate their dwellings and sleeping rooms adequately.

(5). Rats are certainly not plentiful. During the plague scare, everything was done to exterminate both rats and mice.

(6). There is no Health Officer employed.



## (ii) VENTERSTAD (MUNICIPALITY).

\*Report of Dr. ALBERT P. COATES, Medical Officer of Health.

(1). The water-supply has been improved during the past six months by the building of a cement "leading" dam, which has reduced the waste of water to a minimum, and at present the Municipal Council are boring in several places on the commonage with the object of increasing the supply.

(2). The cesspool system, which was almost universal in the village, has at last been done away with and the bucket system has been introduced. The collection and disposal of night-soil is carried out by the Council in a most satisfactory manner.

Slop-water is, unfortunately, still removed by individual householders, but I believe it is intended to alter this in the near future.

Household and other refuse is disposed of by the Council very satisfactorily.

(3). During the half-year there was one outbreak of Small-pox only, and no other infectious disease occurred.

Two cases were discovered first, whereupon both cases and all contacts were isolated and vaccinated. Two cases occurred subsequently amongst the contacts: all were mild, and all were pre-vaccinated. Quarantine was most rigidly enforced, and the disease did not spread. Vaccination was also largely performed amongst other residents in the village.

A small building of wood and iron has been erected about 1,000 yards from the village, to be used as an isolation hospital should necessity arise.

(4). No especial action has been considered necessary under this section.

(5). There are no rats in the village.

(6). Same as in last year's report.

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 ALEXANDRIA.

## (i) ALEXANDRIA (VILLAGE MANAGEMENT BOARD).

No report furnished.

## (ii) PATERSON (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—Nearly every dwelling is supplied with a rain water tank for drinking purposes, and with wells for household and washing purposes. The well-water obtained is very good and plentiful, but each well is on the erf of the householder and is not under the Board's direct control.

(2). There is no system of disposal of night-soil, slop-water, etc.

(3). During the year there has been only one case of infectious disease, viz., Typhoid Fever. This was the case of a person who contracted the disease while absent from his home, and died about a week after he reached here.

(4). The Board's Regulations have just been framed, but they have not yet been approved of, and as this Board is only in its infancy, it will have to feel its way a little. There is no fear of overcrowding within these limits, as there is ample space for twenty times the population.

(5) and (6). Nil.

(7). The Board will do all in its power to keep this area in a clean and healthy condition.

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 ALIWAL NORTH.

## (i) ALIWAL NORTH (MUNICIPALITY).

\*Report of Dr. LUTHER WATSON, Medical Officer of Health.

(1). Water-supply.—Rain-water, conserved in tanks, is the chief source of supply, but owing to the extended drought this has, in a large number of premises, become exhausted; so that many people are now dependent upon the Orange River water which is brought up in water barrels. Watercart owners charge from 2s. to 2s. 6d. per barrel, the former prices previous to competition being from 3s. 6d. to 4s. 6d. The river water is at present very muddy and has a tendency to

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\* Forwarded by the Municipality for publication.

act as an irritant unless filtered. Before the up-country rains, the water was clear and wholesome.

The water scheme from the Orange River is still under construction, and if the river rises, the water-supply will not be available for some time.

(2). Night-soil.—The single tub system is in vogue. This should be duplicated as soon as a force of water is procurable for flushing the tubs. Slop-water, in most cases, is thrown on to the gardens or sometimes in trenches. In some instances, people have thrown it out into the streets, whilst a few cart it away. I have urged for a regular removal by Municipal carts.

Household refuse is removed by private contract, as required by individual householders. Up to recently a Municipal cart was detailed for removal of rubbish when applied for, but, owing to an outbreak of Glanders amongst the Council's horses, the cartage under this system was abandoned.

(3). Infectious Diseases.—During the half-year ended June 30th there were twenty-one cases of Enteric Fever reported, of which thirteen were European and eight coloured persons. One case arrived from Potchefstroom after being almost a week ill.

No Infectious Diseases Hospital is provided. Premises where infectious disease is known to exist are kept under surveillance, and any insanitary conditions removed as far as possible.

(4). New water furrows have been constructed of stone in some of the main streets in order to remove unpleasant effects of mineral spring water causing bad odour by soaking into the surrounding ground and towards foundations of buildings. The Sanitary Inspector reports at once any accumulation of filth, or committal of nuisances, and orders are given for their removal. Dwellings and habitations are constantly under supervision by the Sanitary Inspector and Medical Officer of Health, as are also the slaughter-houses and locations.

(5). Rats have not been exceptionally numerous, and very few were brought to the town office for destruction under Plague Regulations.

(6). A Medical Officer of Health is appointed at a remuneration of £60 per annum.

(7). Birth Rate for 1903:—

	Gross Total Registered. Per 1000.	Corrected Total. Per 1000.
European ... ..	41·0	27·3
Coloured... ..	41·5	35·7
Death Rate for 1903:—		
European ... ..	22·8	11·4
Coloured... ..	41·5	36·2

The high mortality amongst natives is accounted for by the epidemic of summer Diarrhœa and Pneumonia which occurred last December; also by the fact that natives have no idea of nursing and dieting during disease. There were no European deaths from Enteric Fever.

Five deaths from Phthisis were all in invalids from Europe.

#### (ii) LADY GREY (MUNICIPALITY).

\* Report of Dr. JOHN CRANKE, Medical Officer of Health.

(1). The water-supply is derived from surface wells, two being under the control of the Local Authority, but many are private. A water scheme is under consideration.

(2). Removal of night-soil is carried out by sanitary carts and buckets.

(3). A mild epidemic of Scarlet Fever occurred, and two imported cases of Enteric Fever. The usual precautions were taken. There is an isolation hospital, which is out of repair.

(4). Several cases of overcrowding have been dealt with, and other nuisances abated.

(6). A Health Officer is appointed yearly by the Municipality.

#### (iii) JAMESTOWN (VILLAGE MANAGEMENT BOARD).

There is nothing fresh to add to the report for 1903, except that the inhabitants are gradually doing away with cesspools, realising that the bucket system is an improvement on the cesspool.

This area has been wonderfully free from infectious diseases.

\* Forwarded by Municipality for publication.



## BARKLY EAST.

## (i) BARKLY EAST (MUNICIPALITY).

(1). Water-supply.—This is drawn from underground rock and tapped by a length of 3-inch piping. It is then conveyed away in buckets or casks by the inhabitants. The source is entirely under the control of the Local Authority. The supply is not adequate, and the Council have a new scheme under consideration, but await plans and estimates from the Public Works Department, King William's Town. The water is pure, and there is very little chance of pollution of the present supply.

(2). (a) A weekly removal of night-soil by the Council's contractor is now in force, but the most objectionable feature is the cart used. However, it is the intention to put the duplicate pail system in force as soon as the funds are in hand, which will be some time during this year.

(b) Slop-water is not yet arranged for, but the matter is in hand, and as soon as the above system is completed this will be embraced.

(c) Household refuse is well looked after, and the Sanitary Inspector keeps this nuisance in thorough check.

Night-soil is deposited in pits and covered in from time to time.

Rubbish is thrown in the open, well clear of the town.

There is great difficulty with the sanitary regulations, and upon the poorer inhabitants the tax or tariff falls heavily for different removals, and there is therefore every chance of this Council applying for permission to levy a rate.

(3). There have been no serious outbreaks of infectious disease. There have been a few cases of mild Scarlet Fever, and all precautions were taken to warn the people. The Council in some cases have undertaken the disinfection of houses, etc. No severe cases of Diphtheria occurred. All the cases of Enteric Fever that have occurred here have been imported. There were more cases than usual in the location and infection seemed to run in families or contacts. However, infected huts were vacated and washed out with chloride of lime and the trouble ceased.

A Small-pox lazaretto has been established, with a separate house for a guard.

(4). Everything possible is done to keep down nuisances by our Sanitary Inspector, and any case of infectious disease is at once carefully attended to. There is no overcrowding.

(5). There are very few rats here, and these are being caught by persons in whose buildings they are found.

(6). No Health Officer is employed, but when necessary the District Surgeon is called in.

## (ii) RHODES (VILLAGE MANAGEMENT BOARD).

No report furnished.

## BARKLY WEST.

## (i) BARKLY WEST (VILLAGE MANAGEMENT BOARD).

No change has occurred in this area, and former reports hold good for the past half-year. Rats are unknown here.

## (ii) DANIEL'S KUIL (VILLAGE MANAGEMENT BOARD).

There is no alteration or addition to make to last year's report.

## (iii) BOETSAP (VILLAGE MANAGEMENT BOARD).

No report furnished.

## BATHURST.

## (i) BATHURST (MUNICIPALITY).

(1). The water-supply is good, almost every dwelling having iron tanks, and a good supply is also obtainable from springs situated within the area of the village.

(2). The houses in the village are scattered and each occupier disposes of his own refuse.

- (3). No infectious disease has prevailed.
- (5). Rats are not prevalent.
- (6). No Health Officer is employed.

(ii) PORT ALFRED (MUNICIPALITY).

\*Report of DR. C. E. JONES PHILLIPSON, Medical Officer of Health.

(1). Water-supply for ordinary drinking purposes is derived totally from rain fall. Springs exist on both east and west banks of the river, the water from which has been analysed and reported on as follows:—

(a) Physical Characters.—Samples not uniform. Some colourless, others distinctly coloured. No odour. Sediment considerable, consisting almost entirely of vegetable debris.

(b) Reaction.—Neutral.

Free and Saline Ammonia = 0.015 per 100.000 parts.

Albumenoid Ammonia = 0.0164 per 100.000 parts.

Oxygen absorbed from permanganate, in three hours at 60.6 = 0.048 per 100.000 parts.

Total solid matter = 220.000 per 100.000 parts.

(a) Volatile = 38.400 per 100.000 parts.

Distinct Charring on Ignition.

(b) Fixed = 181.000 per 100.000 parts.

Chlorine as Chlorides of Na. and Mg. 151.800 per 100.000 parts.

Total Hardness = 18.000.

(a) Temporary 8.

(b) Permanent 10.

Nitrogen as Nitrates and Nitrites = Traces.

Sulphates as  $\text{SO}_3$  present as Calcium and Magnesium Salts, 5.970 per 100.000 parts.

Magnesium as Oxide 12.000 per 100.000 parts.

Calcium as Oxide 20.000 per 100.000 parts.

In my opinion the Albumenoid and Free Ammonia are excessive, and with the traces of Nitrates and Nitrites render the water suspicious. Moreover, the high percentage of Chlorides makes the water unsuitable for drinking purposes.

(2). Night-soil is buried by a contractor at suitable sites. Slop-water and household refuse are buried in the gardens attached to each house.

(3). Infectious Diseases.—Measles, Mumps, and Whooping Cough prevailed. The latter caused many deaths amongst native children through the complication Broncho-Pneumonia.

No infectious diseases hospital accommodation is provided.

(4). Sanitary defects are supervised by the Town Ranger, advised by me.

(5). Numerous rats and mice abound. Numbers were killed, when rewards were offered. This is now discontinued.

(6). The Medical Officer of Health is employed by the Municipal Council at a fixed salary and special terms should epidemic arise within the Municipal area.

BEAUFORT WEST.

BEAUFORT WEST (MUNICIPALITY).

\*Report of DR. A. J. WESTBY, Medical Officer of Health.

(1). No change has been effected in the water-supply since last year. The pipe water is pure, and so far the supply has been adequate.

(2). (a) The system of removal of night-soil is the same as last year. There is a scheme on foot for free removal which, if carried out, will be very beneficial to the town.

(b) and (c) The disposal of slop-water and refuse is unchanged and works satisfactorily.

(3). There were forty-nine cases of Enteric Fever, one of Scarlet Fever, two of Diphtheria, and one of Leprosy reported. Most of the Enteric cases occurred immediately after the first rain in January. Since April very few have been reported. There is no hospital accommodation.



(4). More attention has been paid to the streets, and disinfection has been carried out.

(5). Rats are not prevalent.

(7). Owing to the change of Municipality from one Act to the other, the Local Authority has been very much handicapped, but I look forward to being able to point out many and permanent improvements in my next report.

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#### BEDFORD.

##### BEDFORD (MUNICIPALITY).

(1). The water-supply is still distributed by open furrows. It was hoped that before this the new water scheme would have been well under way, but owing to unforeseen delay in receiving the plans from the Public Works Department, the Council have been unable, as yet, to proceed with the scheme. If the proposed scheme (which provides for the water being distributed by pipes) is carried out, Bedford will be supplied with absolutely pure water. As most of the cases of Typhoid Fever have been traced to the drinking of impure water, it is hoped that with the new scheme Typhoid Fever will be a thing of the past, or very much decreased.

(3). Five cases of Typhoid and eleven cases of Measles have been notified to the Council during the six months ending June 30th, 1904. It is hoped that with the new bye-law, which is now in force, dealing with overcrowding, the Council will be able to deal more efficiently with disease. The new Municipal Location Bye-law will also help to this end. No infectious diseases hospital accommodation has been provided. A number of insanitary huts have been pulled down; filth and other noxious matters are removed at intervals by a Municipal contractor.

(5). No sick mice or rats have been discovered in the Municipality.

(6). The Council employs a Sanitary Inspector, but has no Health Officer.

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#### BREDASDORP.

##### (i) BREDASDORP (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a spring situated in the mountain, which is conveyed in an open furrow and is liable to pollution. It belongs to the D.R. Church.

(2). Night-soil is deposited on a site given by the Board, and is removed by private individuals.

(3). Infectious Disease.—A few cases of Typhoid Fever have occurred. A hospital has been erected by the Board.

(4). All filth, etc., has been removed.

(5). No rats exist in the district.

(6). No Health Officer has been appointed.

##### (ii) NAPIER (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from a spring, and is conveyed through an open furrow which is partly under the control of the Board. The supply is liable to pollution.

(2). Night-soil, slop-water, and refuse are disposed of by the inhabitants themselves.

(3). Diphtheria, Fever, and Influenza have been rather prevalent. There is no hospital accommodation.

(4). No special action has been taken to remedy sanitary defects.

(5). Rats are not prevalent in this area.

(6). No Health Officer is employed.

## BRITSTOWN.

## (i) BRITSTOWN (MUNICIPALITY).

(1). Water-supply.—The water-supply of this town has for years been obtained from a perennial spring, which is opened up, and a small brick building with iron roof has been built round it so as to prevent any pollution of water. The water is led off by means of an iron pipe and is fetched by the inhabitants at its outlet. At the same time it is necessary to note that for years past, owing to the long distance in numerous cases which the householders or their servants have to go for the water, they have been accustomed, despite the warning of the Municipal Council, to use water obtained from wells on their private properties for drinking purposes. As a natural consequence, diseases could be traced to the use of such bad water. Further proof of the use of such bad water is offered from the fact that on account of the continued severity of the drought most of these wells have ceased to give water, with the result that the owners are now compelled to resort to the spring water, and it is noticeable that there are now fewer cases of disease amongst these people.

For a long time the Council has been considering the ways and means of improving the water-supply of the village, and due regard being had to the poor circumstances of a considerable portion of the community, it was necessary to proceed with great care in order not to burden the taxpayers with heavy water taxes.

Several attempts were made to obtain the Government water drill. The conditions were, however, so unsatisfactory that the Council had no alternative but to work out their own salvation. The financial position of the Council did not warrant a large expense in obtaining reports from water experts as to a probable water-supply, and the Council therefore resorted to the "divining rod," by means of which a site was found and operations were commenced where the indications were favourable.

I am pleased to report that with no great expense a good and sufficient supply of water was struck at a depth of about 23 feet. This new well is situated above the village some 500 yards away on the south side, and is well above the level of the town.

The Council is now busy with bringing the water within reach of every house by means of pipes.

(2). Sanitary Arrangements.—With reference to sanitary affairs, I may report that all night-soil, household and other refuse are departmentally removed weekly.

Slop-water is removed by householders to a place appointed by the Council outside the town.

This arrangement is, however, most unsatisfactory, as the majority of householders throw the slop-water in their yards and gardens. This matter has already been discussed by the Council, and it is hoped that in the near future all slops will be removed departmentally.

(3). Infectious Diseases.—There have been several cases of Diphtheria, and prompt steps were taken in all cases to prevent the spread of the disease—the Council acting on the advice of the District Surgeon.

There is no public hospital here, and in any case of infectious disease the patients are treated at their homes, the houses being placed under quarantine.

(4). General Sanitary Arrangements.—The Council has taken all necessary steps to remedy any sanitary defects and to prevent the pollution of water or accumulation of filth and noxious matters, as well as the overcrowding of dwellings.

(5). Plague Precautions.—The Council has always instructed the public to destroy rats, and no cases of plague have broken out in this division.

(6). No Health Officer has been appointed by the Council, but it is customary to employ the District Surgeon in all cases at Government tariff.

(7). The native location is situate about a mile away on the west side of the town, on a site specially recommended by the District Surgeon.

Inspections are periodically made to ensure the cleanliness of this locality.

Near the location there is a well from which their supply of water is obtained, which has been enclosed by the Council. Owing to the drought, however, this well is now dry and the natives draw their water from the town supply.

The health of the town and location generally was very satisfactory at the close of the half-year.

## (ii) DE AAR (MUNICIPALITY).

(1). Water-supply.—All the water used in this town is obtained from wells, of which there are about 25 in number, scattered all over the town. Three of the wells



belong to the Local Authority and all are situated within the area of our Authority. The water is pumped up by wind-pumps, hand-pumps, or a rope and bucket. The water is collected in tanks by private people, and there is no public distribution of water. No water is distributed in pipes or open furrows. The supply is hardly adequate; the water is for the most part pure, and in a few cases is liable to surface contamination from dust, etc.

(2). Night-soil, etc.—Night-soil is collected in buckets, and is removed two, three, or more times a week as is necessary, to a dumping ground about a mile east of the town. Slop-water, household and other refuse is collected in drums and taken away daily to the dumping ground.

(3). Infectious Diseases.—There were only six cases of Enteric Fever during the half-year. These were nearly all treated in their own homes, and in no case was there an extension of the disease. There was no case of Small-pox.

There was a severe outbreak of Whooping Cough, but this was of a mild type and is now abating. There were very few deaths. No case of Diphtheria occurred.

There is no Infectious Diseases Hospital in this town. Should an outbreak of epidemic disease occur, tents or other temporary accommodation has to be provided.

Vaccination to the extent of 250 primary and re-vaccinations were performed during the half-year.

(4). Sanitation, etc.—No sanitary defects were found to exist during the year. No filth is allowed to accumulate, and any noxious matter is at once removed. There are no overcrowded dwellings, and none that are unhealthy or dangerous to life.

(5). There are very few rats in this town, and no steps are taken for their extermination.

(6). No Health Officer, other than the District Surgeon, is employed by the Local Authority as this is a newly-proclaimed Municipality and is not in full working order yet.

(7). No other matters of importance to report as the District Surgeon has fully reported thereon.

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#### CALEDON.

##### (i) CALEDON (MUNICIPALITY).

\*Report of DR. A. J. ALBERTYN, Medical Officer of Health.

(1). The town of Caledon is supplied with water obtained from a spring in the Swartberg Mountains, which is under the control of the Local Municipality, and is situated within the area of said Municipality. The water is taken and stored in a covered reservoir at the fountain head, and is then led in pipes and distributed in pipes to the various houses for domestic use. The water is absolutely pure and palatable and not liable to pollution.

The water for irrigation purposes is also obtained from the same source and is stored in an open reservoir holding about 6,000,000 gallons; from the reservoir it is led in open furrows through the town.

The supply of water for both domestic and irrigation purposes is at present quite adequate for the requirements of the town.

(2). (a) The system in vogue for the removal of night-soil is the bucket system. The night-soil is deposited in suitable pits dug for the purpose about two miles from the town.

(b) The slop-water is also disposed of in the same way.

(c) Household and other refuse is collected and deposited about one mile from the town on the north side. This is not a suitable place as the north wind prevails in Caledon, which blows directly across the dumping ground towards the town.

I have already drawn the attention of the Municipality to this fact.

(3). Caledon has been fairly exempt from infectious diseases, but cases of Typhoid Fever, Diphtheria, Measles, Whooping Cough, and Scarlet Fever have occurred. No steps have been taken for preventing or dealing with the outbreaks thereof.

There is no infectious diseases hospital accommodation, except the hospital under the Contagious Diseases Act.

(4). No action has been taken in regard to sanitary defects or pollution of water, etc., as none of these defects have been found to exist.

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\* Forwarded by Municipality for publication.

(5). Rats are not prevalent in the area of the Municipality, not necessitating any steps being taken for their extermination. A few only have been found since the opening of the railway.

(6). A Health Officer is employed by the Municipality.

(ii) GREYTON (MUNICIPALITY).

\* Report of Dr. R. D. PARKER, Medical Officer of Health.

During the last six months there has been no material alteration in the sanitary arrangements of the Municipality of Greyton. There was a small outbreak of Enteric Fever, to control the spread of which every effort was made by the Municipality. The water courses were emptied and cleaned out. The previous custom of burying excreta in gardens has been prohibited and compulsory erection of closets, with weekly removal of the pans, enforced.

Rats are still unknown.

With the exception of the small outbreak of Enteric Fever the health of the inhabitants of the Municipality is good.

(iii) HERMANUSPETRUSFONTEIN (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—The water-supply is as reported previously. It is derived from springs about a mile from the village and is under control of the Village Management Board. The water is collected into a large cemented reservoir, and carried into the village by an iron pipe. The water is pure and there is no danger of pollution.

(2). (a) Night-soil, (b) Slop-water, (c) Household Refuse.—No alteration has been made in this since last year.

(3). There have been a few cases of Whooping Cough. No infectious diseases hospital accommodation has been provided.

(5). There are no rats here.

(6). No Health Officer is employed by the Local Authority.

(iv) STANFORD (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from a spring which rises to the south of the village within the area controlled by the Board. The stream in its course goes out of this area, but enters it again. The water is conveyed by an open furrow, the quantity being sufficient and in itself pure.

(2). Night-soil is disposed of as manure in gardens.

(3). No infectious disease has occurred during the half-year. There is no hospital accommodation.

(4). Nil.

(5). Rats are unknown here.

(6). No Health Officer is employed by the Local Authority.

(v) VILLIERSDORP (MUNICIPALITY).

(1). Water-supply.—This is derived from two sources, viz., from the Elands River and from the river coming from the Asvogelkop; this is conveyed by means of furrows. For domestic drinking purposes the water has to be obtained from open furrows running through the town.

(2). There is no regular system being carried out for the collection and disposal of night-soil. The bucket system is adopted and carried out in a fairly systematic manner, the excrement being finally deposited on private ground near the commonage below the point at which the water-supply is taken out of the Elands River.

The manner of disposal of slop-water and household and other refuse leaves much to be desired, it being left to the option of the occupier whether such refuse be removed by Municipal cart or deposited on erf or garden.

(3). Since the last report of the local doctor no cases of Scarlet or Typhoid Fever, or other such sicknesses have been reported.

(4). Beyond the cleaning of sluits and water furrows, and instructions given to householders to keep their premises clean, no further steps have been taken.



(5). The presence of rats in the district of this Local Authority has not been brought to my notice.

(6). No Health Officer is employed by the Local Authority, and there is no doctor residing here at present.

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### CALVINIA.

#### (i) CALVINIA (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—As reported previously, this village is dependent on well-water, each erf-holder having his own well.

The supply is adequate, but very liable to pollution on account of high winds blowing germs and rubbish into the well, against which the Board has no control.

(2). The Board has a proper sanitary cart by which night-soil is removed, and employs a contractor who removes night-soil and refuse. The refuse is taken to a spot about a mile from the village, and night-soil the same distance, where it is emptied into pits which, when filled, are closed with ground.

(3). Typhoid Fever has not been prevalent during the year, but Diphtheria has been prevalent, and Syphilis has been and is still very prevalent, both amongst white and coloured people. It is absolutely necessary that a hospital should be built on the £ for £ principle, in order to cope with the infectious diseases. Patients now are allowed to move freely among the non-infected people. The Village Management Board has not sufficient revenue and prospects to build the required hospital.

(4). Sanitary Defects.—The Board is not aware of any sanitary defects existing within the village area. Sanitary arrangements are well attended to.

(5). Rats.—There are no rats here.

(6). Health Officer.—No Health Officer is employed, but the District Surgeon does the work.

#### (ii) BRAND VLEY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the Zak River, and conducted by means of an open furrow, about twelve miles in length into the local dam, from whence connection is effected with the various houses by means of a small open furrow. Under ordinary circumstances the water-supply is adequate, but of recent years, owing to the prolonged drought, there has been continually a scarcity of water. At present the dam is again empty, and water for drinking purposes is being carted from the river bed, a distance of about three miles. The water, being dam water, and conducted by means of furrows, is, of course, liable to pollution, but hitherto there has been no reason to complain of the water becoming unsuitable for consumption, until it becomes very low, *i.e.*, a depth of about three feet. Good water could no doubt be obtained by boring, say, to a depth of between 200 and 300 feet, but, of course, the financial position of the Board precludes such an extensive undertaking. In this respect most small villages in these parts suffer alike. It would be well if Government could be induced to assist Local Authorities with loans, for this particular purpose.

(2). Collection and Disposal of Night-soil, etc.—This is conducted in the same manner as reported last year. I regret to state that many infringements of the regulations occur in connection with this matter, but, owing to the distance to nearest Magistracy (*i.e.*, Calvinia), the Board is reluctantly compelled to let delinquents off with a warning, as the expense of prosecution would be far more than the fines imposed. We have no special Justice of the Peace here, nor anyone else qualified to maintain authority, and, although it has been brought to the notice of the Law Department on three occasions (twice by petition, and once privately), no apparent notice has been taken of the matter. It is useless having Local Authorities unless they are placed in a position to enforce their regulations.

(3). Infectious Diseases.—This district, owing no doubt to its being so sparsely populated, is singularly free from diseases coming under the above heading. No cases have been reported for several years. There is no Contagious Diseases Hospital, and, under the circumstances, none is required.

(4). Defects under this heading are not of frequent occurrence. When they do occur it is almost impossible for the Board to prosecute, for reasons given above. People are, however, approached, and the matter adjusted as well as possible.

(5). Rats are seldom seen.

(6). No Health Officer is employed.

(iii) LORIESFONTEIN (VILLAGE MANAGEMENT BOARD).

There are at present no sanitary arrangements in this area. The health of the inhabitants has been good, and no outbreaks of infectious disease have occurred.

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CAPE.

(i) CAPE TOWN (MUNICIPALITY).

(1). The sources of the Cape Town water-supply are from springs on the north-west of Table Mountain, and the catchment area on the summit thereof. The springs are within the Municipality, but the catchment area is not. The water flows from its sources through pipes to the reservoirs Nos 1 and 2, and to the Molteno Reservoir. The water is exceptionally soft, and on analysis is found to be of great purity from the springs which are being used at present. The water from Table Mountain is discoloured through a quantity of vegetable matter being held in solution. As far as possible each house has a covered galvanised iron tank for the storage of water, and in order to prevent waste the system known as the "dribble system" is in use. This consists of placing on the supply pipe to the cistern a pipe with a small orifice which can be regulated so as to deliver a certain amount of water during the twenty-four hours, thus 100, 200 or 400 gallons as the case may be. The dangers and inconveniences of this system have been repeatedly pointed out, and, in fact, are admitted by everyone capable of forming an opinion, so that it is unnecessary to again make mention of them. The water is stored on Table Mountain in the Woodhead Reservoir, capable of containing 225 million gallons, and the Hely-Hutchinson Reservoir, with a capacity of 200 millions. The portion of the City at high levels is supplied by mains which are filled from a small service reservoir, called the Mocke Reservoir, on Kloof Nek, the water to which is sent from the Woodhead Reservoir.

(2). Provision has been made for the removal of all sewage matter on the water carriage system by means of well-constructed sewers with an outfall into the sea at Green Point. A few houses in isolated positions are not connected with sewage sewers. Rain and surface waters are carried by stormwater sewers into Table Bay, and this system is being rapidly extended to the higher levels of the City. Household refuse is removed daily, and is carried by rail to reclaimed land beyond Durban Road Station. There is a necessity for a small destructor for the destruction of specially infectious material, and especially unsound food, to prevent the same being consumed after seizure. The scavenging of the City has now been undertaken for several years by the Council itself.

(3). Notified cases of Infectious Disease:—

January 61, February 48, March 30, April 45, May 71, June 77; total, 332. Of these 139 were Tuberculosis.

In January 24 cases of Enteric Fever were notified.

In February 18 cases of Diphtheria were notified, and in March 12 cases of Scarlet Fever.

Hospital accommodation has been provided, viz.: One pavilion of two wards, containing six beds and two cots each, and an Observation Block of three wards each with three beds.

(4). House to house inspection has been carried out through the six months, about 40,000 inspections being made.

(5). Three ratcatchers have been employed during the six months catching rats on premises known or suspected to be infected with rats, with occasional additional assistance. A payment of 6d. is made to anyone bringing rats to the Fish Market. The number of rats destroyed was 7,443.

6. The Medical Officer of Health, appointed by the Corporation, is under agreement to devote the whole of his time to the office,



## (ii) CLAREMONT (MUNICIPALITY).

\* Report of Dr. G. G. EYRE, Medical Officer of Health.

(1). Water-supply.—The source is nearly all spring, from which the water is pumped directly into the mains. The control is vested in a Board, upon which my Local Authority is adequately represented. The distribution is by pipes. The water is not liable to pollution, but the supply is very inadequate.

(2). (a) Night-soil.—Throughout the Municipality the pail system is in use, the night-soil being removed by the Municipal Sanitary Department and deposited on a farm in trenches. The ground is then regularly cultivated.

From such largely frequented premises as Breweries, Railway Stations and Hotels removals are made three times a week. These amount to about 50 pails. From certain large houses removals are bi-weekly, and total 30 pails. From all other houses the night-soil is removed once a week. From all these sources the sanitary service deals with over 2,000 pails a week, using three wagons, holding 70 pails each, and employing 14 hands all told. Night-soil is collected from 2,300 houses.

Slop-water.—This is removed daily except Sunday, the Municipality employing ten half-circular wheeled tanks, holding 260 gallons apiece, served by 18 hands. The slop-water is collected from 1,000 houses, and totals 2,200,000 gallons annually.

(c) Household Refuse.—This is collected from all premises three times a week and deposited on any available ground, where it is covered with soil, and creates no nuisance. For this removal six carts are employed and 14 hands. On an average each cart makes six journeys to the depositing site per diem. The refuse is collected from 2,300 houses.

Road Cleaning.—Every road, viz., 25 miles of roadway, is cleaned once a week, while the main road and cab stands are cleaned twice a day.

(3). Infectious Diseases.—Thirty-six cases of Enteric Fever have been notified, twelve of Diphtheria, and eleven of Scarlet Fever, and one of Puerperal Septicæmia.

No Infectious Diseases Hospital accommodation is provided.

(4). Remedying of Sanitary Defects.—Two sanitary inspectors are employed, and numerous convictions have been obtained in the Courts in consequence of their inspection and report.

In addition to the above the Town Clerk writes as follows:—

I am of opinion that rats are not more prevalent in this district than in the adjoining districts. The Council pays 6d. a head for rats, and the amount paid in respect of the same for the half-year ended 30th June, 1904, was £15 11s. 6d.

The conditions of appointment of the Medical Officer of Health are somewhat vague. He reports monthly to the Council, and matters of health and sanitation are usually referred to him for his opinion. He is liable at any time to have sanitary matters referred to him for inspection and report.

## (iii) D'URBANVILLE (MUNICIPALITY).

\* Report of Dr. L. F. BICCARD, Medical Officer of Health.

(1). The water-supply is drawn from springs within the local area and distributed from house to house in galvanised pipes. The supply is both plentiful and of excellent quality. There is no risk of contamination, either at the source or during transit.

(2). Slop-water is still allowed to be deposited in the different gardens. Night-soil has not yet been provided for, and is still buried in gardens: the Council, however, hope soon to establish a system of removal.

House refuse, etc., is systematically removed by the Municipal carts, and deposited outside the village.

(3). The health of the village has been very good, only one infectious case having been reported during the half-year.

(4). There are two butcheries, neither of which is kept in the best desirable manner, but will soon be under control of the Divisional Council Inspector, when the local regulations come into force.

(iv) GLEN LILY, FAIRFIELD AND PAROW (VILLAGE MANAGEMENT BOARD).

(1). At present there is no official water-supply; the residents are mostly using surface water from wells at a depth of about eight feet, and where no pure water is obtainable, rain water is stored. Negotiations are being entered into with a local syndicate to supply fresh water from their proposed scheme on the Tygerberg Mountain, at the farm Plattekloof, and also with the Cape Town Corporation to receive a supply from their proposed Berg River Hoek scheme, which will, if undertaken, pass through these townships, but nothing definite has been done in the matter.

(2). The night-soil is collected once a fortnight, and taken to the depositing ground (about two miles from the boundary of the Village Board) which is situated on the farm "Zandgat," owned by Mr. F. Kotze. The sanitary pails are of a much larger size than those used by any other Local Authority in the Cape Peninsula, and the night-soil is deposited in trenches five feet deep, and covered in well when full.

No arrangements have as yet been made for the collection of slop-water and household refuse, on account of the absence of finances for these purposes. At present they are buried by the residents on their waste ground.

(3). Only two cases of infectious disease have been reported to this Board (one of Enteric Fever and one of Diphtheria) up to the 30th June, 1904.

No Infectious Diseases Hospital has been provided.

(4). As regards pollution of water no filth or noxious matters are allowed to be buried near wells, nor are filth and refuse allowed to accumulate. Overcrowding is not allowed, the Regulations, as framed under Act 23 of 1897, being applied at once, where needed.

(5). Rats are not prevalent in this locality.

(6). No Health Officer is employed, but sanitary and other matters are supervised by the members of the Board.

(7). The present means of conveying away the storm water which comes from the adjoining hills is far too inadequate. The Divisional Council has been written to regarding the matter, but up to the present date nothing has been done.

(v) GREEN POINT AND SEA POINT (MUNICIPALITY).

\* Report of Dr. GEO. A. BATCHELOR, Medical Officer of Health.

The Suburban area of Green Point and Sea Point under the control of the Municipality of Green Point and Sea Point has an area of 1,330 acres, of which 440 acres are mountain land, and 60 acres beach ground.

Population.—The population of the combined area, according to the last Census taken was 8,840, an increase of 1,280 since the Census taken on the 1st July, 1902.

The particulars of the population are as follows:—

Males.	Females.	Males.	Females.	
Under 15.	Under 15.	Over 15.	Over 15.	Total.
1,002	1,071	3,370	3,397	8,840

Race distinction:—

European.	European.	Coloured.	Coloured.	
Males.	Females.	Males.	Females.	Total.
3,902	3,576	470	892	8,840

During the half-year ended June 30th, 1904, 53 new buildings have been erected. For statistical purposes the number 8,800 is used.

(1). Water-supply.—The water-supply and its distribution is the same as stated in my last report. During the half-year 12 water supplies have been reinstated.

\* Forwarded by Municipality for publication.



(2). Sewage Disposal.—The water carriage system is in use throughout the district. During the half-year twenty-three water tests and sixty-eight smoke tests have been made; ten drains have been relaid, one repaired; twelve ventilation pipes have been repaired; seventy-nine drains unstopped and cleaned; nine gully traps repaired; eight fresh inlets repaired; five W.C.'s limewashed and cleansed, and nine flushing cisterns repaired; six water supplies reinstated; thirteen W.C. pans cleaned and repaired, and seven manhole covers reinstated.

Disposal of Household Refuse.—The house refuse is collected daily excepting Sundays, and is disposed of as stated in my last report. During the half-year, 2,087 van loads and 991 cartloads have been dealt with, resulting in the removal of 1,323 tons of refuse.

Road Scavenging.—Road scavenging is carried on every day, Sundays included, and has resulted in the removal of 3,599 loads of street sweepings.

General Matters.—During the half-year, 1,061 houses have been inspected. 231 shops, 7 bakehouses, 31 laundries, 35 cowsheds, 18 schools, 213 stables and yards; 411 sundry inspections made and 75 complaints investigated. In five cases, light and ventilation have been improved; 45 offensive accumulations have been removed. In four cases the keeping of animals has been discontinued, and in two cases overcrowding abated; 321 nuisances have been looked into in connection with which 85 notices were served.

(3). During the half-year 28 deaths have occurred in the district, giving a death rate of 6.4 per 1,000 inhabitants.

The causes of death arranged according to systems were as follows:—Nervous system, 2; respiratory system, 6; circulatory system, 5; digestive system, 5; urinary system, 2. Other causes: Cancer, 3; burns, 1; whooping cough, 1; suicide, 1. One case of Pulmonary Tuberculosis ended in death.

Infantile Mortality.—During the same period, nine deaths occurred in infants below one year old, which gives the rate 79.4 per 1,000 births.

Births.—During the half-year 113 births were registered, giving a birth-rate of 25.7 per 1,000 inhabitants.

The births were distributed as follows:—Europeans, 102; coloured, 11; total, 113.

Notifiable Diseases.—During the half-year 57 cases were notified. The notifications for each months were as follows:—

	Enteric Fever.	Scarlet Fever.	Diphtheria.	Erysipelas.	Tuber- culosis
January ... ..	0	6	1	0	1
February ... ..	0	0	0	0	9
March ... ..	1	1	1	1	5
April ... ..	0	18	0	0	1
May ... ..	5	2	0	0	0
June ... ..	1	2	0	0	2
	<hr/> 7	<hr/> 29	<hr/> 2	<hr/> 1	<hr/> 18

Enteric Fever.—(1) European male, 5 years, notified 12th March, imported from Johannesburg. (2) European male, 36 years, notified 4th May, employed in Cape Town. (3) European male, 19 years, notified 13th May, imported from Johannesburg. (4) Coloured female, 45 years, notified 27th May, source undetermined. (5) European female, 39 years, notified 31st May, infected Kalk Bay. (6) European female, 9 years, notified 31st May, infected Muizenberg. (7) European female, 15 years, notified 29th June, source undetermined.

It will be seen that four of the cases of Enteric Fever were definitely traced to infection outside the district.

Scarlet Fever.—The first outbreak of this disease occurred in January, the six cases occurring in four houses. In April a more serious outbreak occurred among a number of children attending the kindergarten section of the Girls' High School. In consequence of the outbreak I made an inspection of the children at the time attending the Kindergarten section and discovered two children in the early stage of the disease. On my recommendation the school was closed for three weeks, and the premises were, during this interval, thoroughly disinfected. About this time an inspection was made of all the schools in the district, and each school was supplied at the time with a printed card setting out the initial symptoms of the principal diseases having an infectious nature.

Tuberculosis.—At my suggestion, my Council made all forms of Tuberculosis notifiable in the early part of January, with the result that 18 cases have been notified during the half-year. The particulars of the cases are as follows:—

Race.	Form of Tuberculosis.	Where disease commenced.
European male, 4½ years	Spinal Disease.	Colony.
Coloured female, 36 years	Consumption.	Sea Point.
Coloured female, 60 years	"	Sea Point.
European male, 40 years	"	England.
European male, 45 years	"	England.
European male, 35 years	"	England.
European male, 18 years	"	Inland.
European male, 30 years	"	In Colony.
Coloured female, 32 years	"	Cape Town.
European male, 18 years	"	England.
European female, 27 years	"	England.
Anglo-Indian, 42 years	"	Bombay.
Coloured male, 38 years	"	Sea Point.
European male, 21 years	"	Grahamstown.
European male, 42 years	"	In Colony.

In three cases no particulars were given by the medical attendant notifying. The general health of the district during the half-year was distinctly good.

(vi) MAITLAND (MUNICIPALITY).

\*Report of DR. J. HEWAT, Medical Officer of Health.

Much has been done by the Municipality during the year to forward the sanitary conditions, and insanitary circumstances as they have arisen have been energetically dealt with by the Council and Sanitary Department.

(1). Water-supply.—This is still deficient, requiring some of the inhabitants to resort to wells, which are in most cases only surface excavations always liable to contamination. It is hoped that the Municipality will continue their praiseworthy exertions to obtain a full and plentiful water-supply for the Municipal area.

(2). Scavenging.—This has been much improved by the adoption of systematic and regular collections under Municipal control and supervision.

Night-soil.—The depositing site which was used on the Flats behind Maitland was condemned by me as unsuitable and a source of nuisance and danger to the inhabitants around.

I would recommend that arrangements be made to remove all night-soil to some distance from Maitland so as to cause the least possible nuisance until a complete drainage scheme be entered into.

Storm-water.—Much has been done to improve the Municipality under this heading, such as the drain along the Main Road and the early projected drain along Coronation Road. The stagnant pools of filth which used to stand about and around many of the dwellings are a thing of the past, as more or less all are now connected with the main drains.

(3). Zymotic Diseases.—No epidemics have occurred during the year, and Maitland has shown a marked absence from any prevalence of the serious zymotic diseases.

Sanitary Department.—This has been well supervised and much good work done considering the small staff at the command of the Secretary, who must be specially complimented upon the earnest and ready way he has assisted the Health Officer in carrying out any suggestions made.

Many reports have been supplied by me during the year, as a result of which insanitary conditions in each case were at once removed.

The following infectious diseases occurred within the Municipality during the year from July 1st, 1903, to June 30th, 1904:—Enteric Fever, 27 cases; Diphtheria, 9 cases; Scarlet Fever, 1 case; total, 37.



## (vi) MOWBRAY (MUNICIPALITY).

\*Report of DR. M. L. HEWAT, Medical Officer of Health.

(1). The water-supply is pure and satisfactory in quality, but inadequate in quantity during the late summer months even for domestic purposes, and leaving none, even in the winter, for drainage requirements. It is derived from springs, stored in reservoirs and supplied in pipes on the dribble system mostly, and is under the control of the Municipality jointly with the neighbouring Municipalities through the Municipal Waterworks Board.

(2). Night-soil, slops and refuse are collected by carts departmentally, and deposited on the Raapenberg farm about one mile from the Town Hall.

(3). Infectious disease has been practically unknown. A few sporadic cases have occurred, and these have been at once isolated at their homes, and every precaution taken to prevent spread.

There is no isolation hospital for infectious diseases.

(4). The usual precautions under the guidance of a trained sanitary staff are taken to prevent nuisances of all kinds and insanitary occurrences, and to remedy them as they occur.

(5). Rats are not specially prevalent. The Municipality pay 6d. per rat brought to the Municipal office. No other method is adopted officially for their extinction.

(6). The Health Officer is employed by the Local Authority at an annual salary to advise in all matters pertaining to the Health of the Municipality, and has no executive function.

(7). There is nothing of importance further to report, except that the general sanitary condition of the Municipality continues to improve. Streets are being gradually curbed and guttered.

There is no attempt made to drain the Municipality, except into the Liesbeek River; and this will be an impossibility until an adequate supply of water is available for this purpose.

The Vaccination Act is practically ignored within the Municipality; no provision being made for the public vaccination of the people.

## (viii) RONDEBOSCH (MUNICIPALITY).

No report furnished.

## (ix) WOODSTOCK (MUNICIPALITY).

\* Report of Dr. C. T. THORNTON COMBER, Acting Medical Officer of Health.

(1). The water-supply for this Municipality is derived from the Rondebosch springs and from the Cape Town supply. The former supply is partly controlled by, but is not within the area of, this Municipality. The water is stored in reservoirs and led on in pipes, the quality being good, but the quantity insufficient.

(2). The pail system is in force, weekly collections being made of night-soil which is buried in trenches. Slop-water is disposed of by pipe drains and street channels, and refuse is collected daily and removed to a tip on reclaimed land on the beach. The refuse tip is kept burning.

(3). Scarlet Fever has been prevalent rather above the average, but other diseases have been below the average. The measures taken were the isolation of patients, the free supply of disinfectants, and the disinfection of premises and clothing after convalescence.

(4). The Abatement of Nuisances.—Notice has been given to offenders in this respect, a time limit being given for the abatement thereof, failing compliance with which the Council has caused proceedings to be instituted, or has executed the work itself and recovered the costs.

(5). As far as can be ascertained, rats are less numerous than formerly. The Council provides traps free of hire, and pays 6d. per head for rats brought to the Municipal yard.

(6). A Health Officer is employed by the Council partially to advise the Council as to combating outbreaks of disease, to report upon the suitability of doubtful premises as dwellings, and generally to guide the Council on health matters.

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## (a) WYNBERG (MUNICIPALITY).

\*Report of DR. P. B. TRAVERS STUBBS, Medical Officer of Health.

(1). Water-supply.—The sources of the Wynberg Municipality water-supply are from (a) the catchment area embracing the southern extremity of the summit of Table Mountain, confined in the two reservoirs the Alexandra and Victoria, whose capacity is 30 million gallons respectively.

(b) From springs situated in the Orange Kloof.

Both sources are outside the Municipal area; but the latter is on Municipal property.

The water flows from these through iron pipes to the service or distributing reservoirs, situated within the Municipal area "on Park lands" immediately above the military camp.

The water is exceptionally soft, and the report of the Government analyst is most satisfactory.

There is an abundant supply and an excessive quantity is now running to waste.

The distribution is through piping, and every house is on the full pressure system.

(2). The method in vogue at present respecting the collection and disposal of night-soil is in pails supplied by the Municipality, and removed every night to the depositing site on the Flats, and buried in trenches prepared during the day. At the time of writing this, steps are now being taken to pass this through the drainage pipes to the sewerage disposal works, and no doubt ere this appears in print, many houses in the Municipality will be enjoying the benefit of being connected with the main drainage.

Slop-water.—This is collected daily and passed through the sewer to the disposal works.

Household and other refuse is collected by the Municipal carts daily and utilised for filling in large disused clay holes, the same being covered in daily with sand from the roads and drainage trenches.

(3). *Re Infectious Diseases*.—There was an outbreak of Typhoid Fever during the earlier months of the year, due to a contaminated milk supply, which was stamped out after the enforcing of certain precautions before the distribution of the milk.

Measles have been, and always will be, a source of trouble until steps are taken to make it a notifiable disease under the Public Health Act. It has been very prevalent in the Municipality, due to children attending school whilst some members of the household are lying ill at home.

No infectious diseases hospital exists, although one is sorely needed, and an admirable site exists near Bamboovlei; but in course of time such a hospital will have to be built, considering the rapid growth of the Municipality and the overcrowding that exists, especially in the homes of the poor.

(4). Talk, and serving notices have been the only means adopted towards the abatement of nuisances. In a few isolated cases the legal machinery has been put into action, but as this expensive procedure necessitates three or more officials spending a day in Court, it is not often resorted to, as they can be more profitably employed in visiting the houses and Municipal lanes.

(5). Rats are fairly prevalent in butchers' shops, bakeries, and water courses. They are too old and knowing to be trapped. Payment is made for those rats (dead or alive) brought to the Municipal office. They are then cremated.

(6). A Health Officer is employed by the Municipality.

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CARNARVON.

## (i) CARNARVON (MUNICIPALITY).

(1). The water-supply is obtained almost entirely from wells, situate in the village. Nearly every erf has a well on it. There are two wells situated on Municipal property, from which inhabitants who have no wells of their own obtain water. A number of coloured inhabitants obtain their supply from an open furrow, the water coming from a spring situate on the Municipal property.



It is impossible for the Municipality to see that all these wells are properly and regularly cleaned. The Municipal wells are kept clean, and on the whole the water is pure, as the soil is of limestone formation, and, therefore, the sources of the water-supply cannot be easily polluted. The water-supply is ample.

(2). Night-soil, and household and other refuse are collected and removed by contract to a spot about 2,000 yards north of the village, where the night-soil is deposited in sandpits, which are closed up regularly. This spot is beyond the Carnarvon River, and away from the source of the water-supply.

Slop-water unfortunately is not regularly removed, but the Municipality intends entering into a contract for the removal thereof next year. The night-soil is removed from every house twice a week, and the household refuse once a week.

(3). There have been a few cases of confluent Small-pox, the patients having now recovered. There is no permanent Infectious Diseases Hospital accommodation, but the Municipal Council has a number of bell tents which are pitched whenever infectious diseases like Small-pox occur. Cases of Diphtheria and Fever are isolated in the dwellings when they occur.

The Municipal Council has given notice supplementary to the Government notices advising people to have themselves vaccinated.

Disinfectants are supplied gratis by the Council in the shape of Carbolic Powder, Condy's Fluid, and Chloride of Lime.

(4). All refuse from within the precincts of the town and from the streets is removed by contract, and all slaughtering takes place outside the town, at the Municipal slaughter-house. The locations are periodically inspected, and when overcrowding occurs the inhabitants are warned and prosecuted.

(5). There are no rats in this town.

(6). The Council employs no Health Officer regularly, but all cases of Infectious Disease are instantly reported to the Council by the Medical practitioners.

#### (ii) VAN WYK'S VLEI (VILLAGE MANAGEMENT BOARD).

(1) (2) and (4) There is nothing to add to the report for 1903.

(3) There has been apparently no sickness of any kind.

(5). No rats exist; a few field-mice may now and then be seen.

(6). No Health Officer is employed.

#### CATHCART.

##### CATHCART (MUNICIPALITY).

(1). The water-supply is derived from springs on farm No. 12. The water rights have been purchased by the Government Railway Department. The source is under the control of the Municipality and Railway Department, but is situated outside the area of the Municipality. Water is collected by means of dams, three in all, and is led to the Railway Station and town by means of pipes. The water-course from the source is fenced in, is pure, and is not liable to pollution.

(2). The pail system is in use, and night-soil is removed by the Council's contractor twice or three times a week.

Slop-water is removed daily by contract.

Household refuse is removed twice a week by contract.

(3). Very few cases of infectious disease have occurred in the town, and the Medical Officer has always taken every precaution. There is no hospital accommodation provided in the town or at the Gaol.

(4). The Council have taken action in connection with the water-supply by having the whole of the town supply fenced off and cattle troughs erected outside.

Places have been marked off on the Commonage for the deposit of rubbish, etc., and a Sanitary Inspector has been appointed to watch the inhabitants' interests in this matter.

(5). Rats are numerous in one or two of the produce stores in town, but the other buildings are not affected. The owners of produce stores are attempting to destroy the rats, and have met with a fair amount of success.

(6). Dr. G. W. Robertson has been offered the position of Medical Officer of Health. No conditions or fee were stated.

## CERES.

## (i) CERES (MUNICIPALITY).

\* Report of Dr. G. C. MUNNIK, Medical Officer of Health.

(1). The water-supply is from mountain springs under the control of the Local Authority, and situated within the area of this authority. It is distributed by pipes to the village proper, and is sufficient in quantity and pure. As was remarked in my last report a large section of the coloured population still drink from the furrow, which is, of course, liable to pollution. This apparent neglect on the part of the Local Authority is due to a want of funds.

(2). Night-soil is collected by pails and disposed of by systematic removal for burial outside the town. This sanitary extension, however, does not obtain with the native locations, where it is still buried in the garden if not disposed promiscuously somewhere else.

(3). Infectious Diseases.—Nothing serious has occurred beyond epidemics of minor ailments.

(4). Outstanding defects are the water-supply and removal of night-soil affecting the coloured section. Overcrowding and unhealthy dwellings are not sufficient for serious attention.

(5). No rats have been observed in this district.

(6). A Health Officer has been appointed at a nominal salary.

(7) Pulmonary Tuberculosis is not uncommon amongst natives, in fact, this disease is on the increase. The infection was undoubtedly largely carried here by victims from abroad in previous years.

## (ii) PRINCE ALFRED'S HAMLET (MUNICIPALITY).

(1). The water for household purposes and irrigation is obtained from the Wagenbooms River at the foot of the Bokkeveld Mountains, situate without the area of the Local Authority. The water is collected by means of open furrows. The supply is adequate, but, owing to the fact that it is collected by open furrows, it is liable to pollution.

(2). Disposal of Excrement, etc.—No alterations have been made since the last report.

Household and other refuse is deposited in the pigsties and on the properties.

(4). The Council is not aware of any existing causes likely to lead to the spread of disease.

(5). Rats are not prevalent here.

(6). No Health Officer is employed by the Local Authority.

(7). One of the most needed improvements that can be made here is, to have the water system properly carried out; that is, to have it collected, stored and distributed by means of pipes. Under the present system there is a constant danger of pollution from animals grazing in the open furrows.

The reason why the Municipality has as yet not laid pipes is lack of money. A loan from Government has been asked for.

## CLANWILLIAM.

## CLANWILLIAM (MUNICIPALITY).

\* Report of Dr. ALFRED A. HAYES, Medical Officer of Health.

The past half-year has been generally healthy. Two mild cases of Scarlet Fever and one of Enteric occurred in the village, the two former among Europeans and the latter in a native. Otherwise the district has been free from acute zymotic disease.

Tuberculosis among the natives is unfortunately increasing, principally affecting females; and I believe contagion to be the most important influence determining its dissemination. The water furrow is better kept than it has been for many years. It is frequently cleansed and repaired, but I should like to direct the attention of the Council to a defective portion at the other side of the plantation, where



an overflow occurs when the furrow is full, and the water which is stagnant returns to the furrow when it is emptied.

An objectionable feature in my opinion is the fact of the native location being above the water furrow.

A scheme is now on foot to supply the village with water by means of pipes, which will be a great convenience to householders as well as advantageous from a sanitary point of view.

With regard to drainage, I consider the Gaol drain a disgrace and a positive danger to public health.

Night-soil and slop-water are removed by the Town Council in carts for the purpose.

Slaughter-houses, etc., are clean and well managed.

I believe a movement is on foot to remove the cemeteries from their present site. I consider that will be an advantage, as they are now only a short distance above the water furrow.

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## COLESBERG.

### COLESBERG (MUNICIPALITY).

(1). Water supply.—The source is a spring controlled by the Town Council. From this spring the water is led by iron pipes into a well-constructed reservoir, which is effectively protected against pollution. From this reservoir the water runs by gravitation through iron pipes, and is distributed by means of seven hydrants throughout the town. The supply is adequate for domestic purposes, but for irrigation and other purposes an increase is desirable, and I think possible of attainment. I do not think that pollution is possible under existing arrangements.

(2). (a) Night-soil.—All cesspools have been abolished. The tub system is used. Tubs are removed regularly, and are of uniform pattern, patent covers being used.

(b) Slop-water.—This is removed daily by means of slop carts, quite away from the town.

(c) Household and Other Refuse.—This is also carted to a dumping ground right out of town.

(3). Infectious Diseases.—The health of the town is normal, no epidemics or outbreak of any sort having occurred. No hospital of any kind has been provided, excepting a Lazaretto for possible Small-pox patients, about three miles from town.

(4). It is not thought that much improvement is possible excepting in respect of overcrowding, and our Council have taken steps to acquire the power to control this.

(5) So far as is known no rats exist here.

(7) Great care is exercised in respect of sanitation in the native location, and a hydrant is placed at a spot accessible and near to the location, so that natives have no longer the temptation which they previously had, to take water from a polluted source.

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## CRADOCK.

### (i) CRADOCK (MUNICIPALITY).

(1). Water-supply.—This is supplied from a spring eighteen miles distant. The water is led to the town through pipes.

(2). Scavenging and disposal of excrement is carried out by the Municipality. The pail system is in use, and removals are carried out between 10 p.m. and 5 a.m.

Household refuse is removed by the Municipality weekly and taken out of the town and buried.

Sanitary Defects.—As far as the pollution of drinking water is concerned, this is impossible under our system of supply, which is by piping direct from the springs.

## (ii) MARAISBURG (MUNICIPALITY).

- (1). This matter has been fully reported on the year before last.
- (2). The *modus operandi* described in the report of 1903 is still being adhered to, and the Council has not yet seen fit to make any changes therein.
- (3). In January last a case of Leprosy was reported. The matter was referred to the Government, and the patient was removed to Robben Island. From January to June last two cases of Enteric Fever and one of Diphtheria were reported to the Council. In each case the Council adopted a summary method of isolation and quarantine, which met with the greatest success and prevented the spread of the diseases.

The method adopted was as follows:—The Council in each case appointed a special sub-committee to carry into effect the quarantine and isolation, with power to use their own discretion; and engaged a guard to prevent people, other than medical attendants, visiting the quarantined area, or house. Through the guard also, the inmates of the quarantined area or house could obtain provisions.

The source of infection in each of the above cases was reported as having been imported, and not of local origin.

- (4). There is nothing fresh to report under this head.
- (5). The remarks of last year under this head still apply.
- (6). The Council does not employ a Health Officer.

## EAST LONDON.

## (i) EAST LONDON (MUNICIPALITY).

\* Report of Dr. R. J. ROULSTON, Medical Officer of Health.

The population of East London in the Municipal area is 14,934 whites and 11,159 coloured.

(1). Water-supply.—There is no change since my report of last year. Mr. Anthony, the Engineer appointed by the Council, has recommended the Gulu River, a tributary of the Keiskama, as a suitable river from which to get the permanent supply.

He reports the supply will be abundant. The great objection to this scheme is the large native location situated near the banks of the river.

Mr. Wright has put before the East London public the Kabosie scheme, which is strongly supported by Mr. Baillie, C.E. The catchment area is smaller, and the annual rainfall greater, than the other scheme; it has the advantage of being free from contamination, and the water proved by analysis to be perfectly pure.

It is hoped this all-important matter will soon be decided, as it is not in the interest of the town to defer it much longer. The fire rates are very high, owing to the insufficient supply of fresh water for extinguishing fire.

(2). The Disposal of Night-soil.—No change has taken place since last year. Household refuse is deposited in the rubbish tip. There is a refuse destructor, but, owing to structural defect, it is not in use.

A scheme for the removal of kitchen and bedroom slops has been drawn up by the Town Engineer, Sanitary Inspector and myself, which the Council has just adopted, and has appointed a contractor to carry out the same. No doubt it will take time to get everything in proper working order. When this is accomplished I feel confident a great many of the disagreeable smells and foci of infection which now exist will be removed and thus benefit the health of the neighbourhood and public.

(3). Infectious Diseases.—Forty-four cases of Typhoid Fever have occurred in the Municipal area, and ten cases were imported, that is, came from the ships in the harbour and by rail. Most of these cases have been treated in the Frere Hospital.

Small-pox.—A commercial traveller, when doing business in the districts of Frankfort, Kei Road, King William's Town, and Queen's Town, from 7th to 20th March, contracted the disease, and informed me he saw several cases among both Europeans and natives. He was treated in the Lazaretto in April and May. No other case appeared until the middle of June, when two persons from Bayeswater Road went on a holiday to Frankfort, where they contracted the infection, and on their return had a slight attack of Small-pox. After these four mild cases occurred in the same house before the cases were notified, the cases being so mild that their

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medical attendants did not suspect Small-pox; consequently, no precautions were taken, and the disease spread. The succeeding cases were more severe. Up to the end of June six more cases were notified. No deaths occurred. Since the commencement of the epidemic, vaccination has been vigorously carried on, over 1,150 persons having been vaccinated, principally Europeans.

Plague.—Three cases have occurred since the beginning of the year. They were treated in the Plague Camp, which has been bought from the Imperial Government by the Municipality and turned into a Lazaretto.

Rats.—The destruction of rodents has been taken over by the Government. At present a number of plague infected rats are found in the rubbish tip and different parts of the town. It is feared the disease may break out among human beings at any time.

Six cases of Scarlet Fever and twenty-three of Diphtheria occurred, with no deaths. The treatment of these cases is most unsatisfactory, there being no Infectious Diseases Hospital in town; consequently, they have to be treated in their own homes, where it is almost impossible to properly isolate and carry out sanitary precautions. I sincerely hope both the Government and the inhabitants of this rapidly rising town will rise to the importance of the occasion and build a modern Infectious Diseases Hospital, where all cases can be properly treated if their own homes are not sufficiently large to permit of isolation, etc.

(4). Sanitary defects are attended to in the same manner as in my last report.

(5). The destruction of rodents is entirely in the hands of the Government.

(6). No change from last year.

(7). Sanitary Defects.—(a) The single pail system is still in existence. Last year the duplicate system was before the Council and passed, but, owing to some reason, has not been put into force.

(b) There is a certain amount of overcrowding which is very difficult to deal with, because of the high rents charged for houses, the supply of which is not equal to the demand, and the reduction of salaries caused by the depression of trade; consequently, one finds two, and occasionally three families living in one house. When Diphtheria or Scarlet Fever occurs in these houses it is impossible to isolate; there is no suitable place to send them for want of an Infectious Diseases Hospital.

Streets.—The principal streets are now watered with salt water, which is a very great improvement, as there is not nearly the amount of dust flying about; the cost of the upkeep is diminished, and the gutters are flushed. The Buffalo culvert is flushed twice a day; 2,500 gallons of salt water are stored at the top of the culvert, and when the floodgate is opened, it rushes down the sewer carrying with it silt and other offensive matters. There is certainly a great diminution in the amount of obnoxious gas, etc., given off. It has undoubtedly improved matters very considerably.

Bakeries are kept in good order.

Wash-houses.—At present most of the washing is done by coolies on the outskirts of the town and on vacant erven. This is unsatisfactory, as one can never tell when the soiled linen of patients suffering from an infectious disease may be washed there, and as the wash water is allowed to run off over the veld, the germs of disease can easily be spread by the winds in the dry season. I would strongly recommend that Municipal wash-houses be erected, with a disinfecting room attached to them, where all linen of infectious cases could be disinfected before being washed, at a small charge.

Plans.—Two hundred and fifty-one plans have been examined and passed by the Council during the half-year. Owing to some defects in our building regulations, avaricious speculators have obliged the Council to pass some plans which I fear will be a great trouble to the health department to maintain in a sanitary condition, or they will be a danger to the public health.

#### (ii) AMALINDA (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from surface and river sources, and is fairly pure.

(2). Night-soil is disposed of by householders themselves.

(3). No outbreaks of infectious disease have been notified to the Board, and no hospital accommodation has been provided.

(4). No action has been taken.

(5). Rats are very prevalent in this district, owing probably to the extensive making of Kafir beer, the refuse from which is thrown on the veld, affording a food supply for the rodents. No steps have yet been taken to remedy the evil.

(6). No Health Officer is employed by the Board.



## (iii) CAMBRIDGE (MUNICIPALITY).

\* Report of Dr. K. B. ALEXANDER, Medical Officer of Health.

(1). Water-supply.—Cambridge is still practically dependent on the rainfall, which is collected off the roofs of houses into tanks, for its water-supply. There are springs of a brack water unsuitable for drinking purposes, under the control of the Local Authority, and in times of drought many householders are obliged to obtain water from this source. A proper water-supply is badly needed.

(2). Night-soil is collected weekly by a Municipal contractor and deposited at some distance from the town. This also applies to household and other refuse.

There is no arrangement made for the collection of slop-water.

(3). Infectious Diseases.—There have been three cases of Enteric Fever, two of Scarlet Fever, and one of Diphtheria. It has been unnecessary to provide any hospital accommodation. The cases have all been treated by disinfection and isolation in their own homes, with satisfactory results.

(4). Overcrowding does not exist to any extent, except in the case of native huts, and since the Municipal bye-laws have come into force, strict measures have been taken to put a stop to this danger. It has not been found necessary to remedy any sanitary defects, the sanitation of the district being good.

(5). No rats, suspicious of plague, have been found.

(6). A Health Officer is employed by the Council whose duty it is to advise on any matter relating to the public health.

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FORT BEAUFORT.

## (i) FORT BEAUFORT (MUNICIPALITY).

\*Report of Dr. W. DUNCAN MILLER, Medical Officer of Health.

(1). The drought through which the district has been passing has emphasised the necessity for carrying into effect the scheme mentioned in last year's report. Work will shortly be commenced upon the proposed new weir across the Kat River, and thereafter the laying of iron pipes from the intake to the town will be undertaken. The water-supply has been fairly good on the whole.

(2). Cess-pools in connection with houses within the Municipality are gradually being closed, and the system of bucket earth closets has been largely adopted. Slop-water and household refuse are dealt with and disposed of at the will of the individual householder.

(3). The Municipality has been very free from infectious disease. There are two isolation huts outside the town which can be used in the event of any outbreak of infectious disease.

(4). The Sanitary Inspector appointed by the Municipality has carried out his duties during the half-year with the result of an abatement of nuisances and the closing of one or two houses which were considered unfit for human habitation.

(6). A Health Officer is employed by the Local Authority to inspect and report when required by the Council and to advise the Council on matters relating to sanitation.

## (ii) ADELAIDE (MUNICIPALITY).

\*Report of Dr. WILLIAM DAVIDSON, Medical Officer of Health.

(1). Water-supply.—Up to the present there is no water-supply for the village, the inhabitants depending for their water on the rainfall, which is conserved in tanks, and when this fails they have to fall back on the river water which, in dry seasons, is not fit for human consumption. During the half-year water was scarce and the river stagnant most of the time, in consequence of which Enteric Fever was prevalent amongst the native population, who depend entirely on the river for their water-supply. A water scheme which has been long spoken about is now commenced, and by the end of the year should be completed.

(2). No drainage system exists. Cess-pools receive and conserve excrement and sewerage, and when these cess-pools are full they are in most cases filled in

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and fresh ones made. Night-soil and slop-water are in most cases thrown into the cess-pools, and household and other refuse thrown into a heap in a corner of the yard, and when this accumulates it is then taken out of the village and deposited at a place set apart for the purpose.

(3). There have been no cases of Diphtheria or Small-pox in the village or district during the past half-year, but during the months of April, May and June Enteric Fever was prevalent in the native location, and a few isolated cases also occurred amongst Europeans in the village. No steps have been taken by the Local Authority for dealing with any outbreak of infectious diseases except in the case of Small-pox, when those infected are removed to the Lazaretto out of town.

(4). The Local Authority has seen that all yards are kept clear of refuse, and as regards overcrowding, this does not exist in the village.

(5). Rats have not found their way to Adelaide, so far.

(6). A Medical Officer of Health is employed by the Local Authority, but when appointed no fixed conditions were mentioned, the Medical Officer attending to any matter when requested by the Board.

(iii) BLINKWATER (VILLAGE MANAGEMENT BOARD).

(1). Water for domestic purposes is conveyed to the village by open furrows, the supply being also used for agricultural purposes. Owing to the drought the water is not so good as formerly, and is becoming less each day, owing to numerous weirs being built on the river, by which much water is taken out of the river.

(2). The sanitation is the same as it was before.

(3). The health of the village has been fairly good.

(iv) HEALDTOWN (VILLAGE MANAGEMENT BOARD).

There is nothing further to add to previous reports.

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FRASERBURG.

(i) FRASERBURG (MUNICIPALITY).

\*Report of Dr. P. J. MADER, Medical Officer of Health.

There is nothing to add to last year's report which calls for special mention, with the exception of an outbreak of Typhoid Fever which occurred in the beginning of the year, full particulars of which will be found in my report as District Surgeon.

(ii) WILLISTON (MUNICIPALITY).

(1). The village is supplied with a sufficient quantity of excellent water from a bore hole with wind-pump, both being under the control of this Municipality; there are no means of storing the water, and it has to be brought to the houses by means of buckets and water-casks. There is a scheme in preparation whereby the water will be brought to and distributed in the village by means of pipes. A further supply is obtained from an open well, being much liable to pollution, and which is almost exclusively used to water animals and for washing purposes.

(2). The disposal of night-soil, etc., is left in the hands of householders, the Municipality employing a Sanitary Inspector, part of whose duty it is to see that night-soil, etc., is deposited at the regular dumping ground, and that every householder takes proper sanitary measures to prevent nuisances.

(3) (4) and (5). Nil.

(6). The Municipality employs a Sanitary Inspector at a salary of £1 10s. per mensem.

(7). Nil.

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## GEORGE.

## (i) GEORGE (MUNICIPALITY).

(1). There has been a sufficient supply of water, which is collected from a mountain stream in a waterhouse, and thence conveyed by iron pipes to the town, and from two reservoirs in open furrows. These furrows become somewhat filled with oak leaves during autumn, but are cleaned at intervals, and flushed from the reservoirs. No household using the furrow-water has suffered in health.

(2). Each householder disposes of his own night-soil and slop-water. There being sufficient garden ground, where these are utilised. A town cart for the removal of household refuse is at the service of any householder at any time when required.

(3). Infectious diseases have occurred from unknown causes in single households, but immediate steps were taken by the Medical Officers in charge to isolate such cases, thus preventing their spread.

(4). The Sanitary Inspector reports any matter that would affect the health of the public, and the Town Council takes immediate steps to have it remedied.

The Council has no building regulations, and, though no shanties are permitted within the area of the town itself, the locations are open to much improvement. The want of sufficient accommodation for the inmates, the almost total exclusion of sunlight—there being no proper windows—and the constant smearing the mud floors with cow-dung, are all matters that seriously militate against the preservation of health, and undoubtedly aid the natural tendency of the mixed coloured races to pulmonary diseases. Consumption is very prevalent among the coloured people.

## (ii) PACALTSDORP (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from a covered-in spring in the centre of the village, from where the inhabitants draw their supply by means of buckets, etc., under the supervision of the street-keeper, whose duty it is to see that no pollution of any kind takes place. The supply is usually sufficient.

(2). There is no system for the removal of night-soil, the houses being situated so far apart that action herein seems unnecessary.

No general system for the removal of night-soil exists, but it is buried by each householder on his erf.

(3). A few cases of infectious diseases were reported and promptly attended to. No Infectious Diseases Hospital exists.

(4). No action has been taken during the past year to remedy sanitary defects.

(5). No action has been taken for the extermination of rats; very few rats have been seen.

(6). No Health Officer is employed.

## GLEN GREY.

## LADY FRERE (MUNICIPALITY).

No report furnished.

## GORDONIA.

## (i) UPINGTON (MUNICIPALITY).

\* Report of Dr. E. H. PHILLIPS, Medical Officer of Health.

(1). There is nothing to add to my last year's report *re* the water-supply to the village of Upington, which remains as it was, "adequate as to quantity, but leaving much to be desired as to quality."

It is noteworthy that the average amount of water in the Orange River is decreasing, markedly according to competent observers, year by year, which phenomenon may be caused either

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(i) By the diminished rainfall throughout the Transvaal, Orange River Colony and north-western districts of the Cape Colony, from which the river draws its source and branches, or

(ii) By the greater number of water-furrows which have been "taken out" of late years to the east of this township for the purpose of irrigating the increasing number of erven under cultivation along its margin.

It will behove the Municipality to take into serious consideration the advisability of sinking wells and erecting pumps so that the water-supply of the future may be as adequate in quantity as it has been in the past.

(2). Matters remain as they were last year.

(3). There have been no epidemics of infectious disease during the half-year ended June 30. A few cases of Diphtheria came under treatment in the village in the earlier months of the year, and I believe some occurred in the district. One case of Enteric Fever occurred among the Cape Mounted Police.

No hospital of any sort, either for infectious or any other diseases, exists in Upington.

I regret to have to report that the scheme to build a Contagious Diseases Hospital in the village, of which I made mention in my report last year, has fallen through.

Six fresh cases of Venereal Disease have been detected and brought under the treatment supplied by the Colonial Government under Part II. of the Contagious Diseases Prevention Act of 1885.

(4). Frequent inspections of the locations and frequent endeavours to keep the huts and their surroundings clean have been made by me.

Many dwellings of one or two rooms, which stand empty for months at a time, are, during "Nachtmaal" seasons, in my opinion, often overerowed.

This matter will be brought before the Council shortly.

(5). No rats are found in this village or district.

(6). A Medical Officer of Health was appointed early in the year, his duties being as follows:—

To report all cases of infectious disease; to write the Annual Health Report; to inspect the locations at least once a month; to keep an eye on the general sanitation of the village and further to report to, and advise the Council on any matter affecting the welfare of the community generally, should such crop up.

#### (ii) KEIMOS (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is brought to the village in an open furrow led out of the Orange River. It is ample for irrigation and domestic purposes.

(2). No proper system is carried out for scavenging and disposal of night-soil, though provided for by the Board's regulations.

Household refuse is mostly carried into the lands and gardens.

(3). A few cases of Amaas occurred here, but, through the action of the District Surgeon, in vaccinating generally, it was quickly exterminated.

(4). A Periodical Court has been established here, and thereby some assistance will be rendered to the Board's regulations.

#### GRAAFF-REINET.

##### (i) GRAAFF-REINET (MUNICIPALITY).

\* Report of Dr. J. M. KEEGAN, Medical Officer of Health.

(1). The water-supply of Graaff-Reinet is obtained from three independent sources.

(a) Mackay's Pits.

(b) The furrows (upper and lower).

(c) Rain water.

(a) Mackay's Pits are a series of wells sunk close to the bed of the Sunday's River at a distance of about six miles from the town.

The wells are lined and covered with substantial masoned work. They are connected with each other and the water conducted into the town by a culvert.



The culvert is a brick and cement aqueduct, very strongly built and in good repair. Its section corresponds to that of a circular pipe about twenty-six inches in diameter, and, if filled, would convey sufficient water for a town much larger than Graaff-Reinet.

Unfortunately, the amount of water brought into town by the culvert is very small, and has been decreasing continuously for the past ten years.

(b) The upper furrow conveys water into the town from the Sunday's River. It is about four miles long, and is open and unmasoned through its entire course.

The amount of water carried by it under ordinary circumstances is very small.

Its upper end runs close to the river bed, and when the river is in flood, is liable to be damaged.

The lower furrow is about a mile long. As its name indicates, it is at a lower level than the upper furrow, and lies between the latter and the bed of the river.

For the greater part of its course from the upper end the lower wall of the furrow runs along the river bed, and, consequently, is very liable to be washed away when the river is in flood. This furrow, like the upper, is an open unmasoned ditch.

When the river is low, the small amount of water in its bed is diverted into the furrows by building across the river bed small dams, constructed for the most part of bags filled with clay. The smallest freshet, however, washes these away, and the work has to be done over again.

Thus it will be seen that the upkeep of the furrows, with their cleansing and repairs, are constant sources of expense.

The amount of water carried by the lower furrow usually exceeds the total amount carried by both the culvert and the upper furrow.

Quite recently an attempt on a large scale has been made to divert the bed of the river away from the furrows, so that there will be less danger of the latter being washed away when the river comes down in flood.

The plan adopted was to build massive walls of heavy unmasoned stones sloping gently from the lower wall of the lower furrow downwards and inwards into the river bed. A most ingenious network of strong iron wire, which passes under the walls as well as round and over them on every side, will prevent them being washed away, and the walls will throw the flood-water from the furrows to the opposite side, and it is hoped will eventually cause displacement of the river bed away from the furrows.

(c) The large majority of houses in the town are roofed with galvanised iron, and the rain-water from the roofs is collected in tanks of which about half-a-dozen are underground. This water is used for drinking and domestic purposes by those who own tanks, but a considerable number of the poorer inhabitants are compelled to drink furrow water.

The furrow water, taken unfiltered from the river, and brought into town in open unmasoned furrows, is necessarily very impure.

The culvert water is soft, pure and altogether of excellent quality. But the culvert stops at the entrance to the town, and its water is then allowed to mix with the water of the furrows.

The combined supply of water from the furrows and culvert is conducted through the town in small masoned open furrows which run along the sides of the streets.

Usually the water is led directly from the street furrows into the various vineyards and gardens for the purposes of irrigation, but in certain places it is stored in open masoned tanks, called "brand-dams."

The water from the "brand-dams" is used for domestic and drinking purposes; some of the public bakeries also use it when the supply of rain-water runs short.

The "brand-dams" are cleaned out at regular intervals, but it will be evident that the water they contain is most impure. It is impure when it enters the dams, and the pollution is increased by the water becoming stagnant in the dams and by the introduction of refuse as dust.

The water-supply of the town from all sources has been steadily diminishing for the past ten years. There is not nearly sufficient water for irrigation purposes during the summer months.

Many proposals have been made for increasing the water-supply.

At present the Town Council is engaged in building a strong cemented weir across the Sunday's River bed a few yards below the intake of the lower furrow.

By this means it is hoped that the subterranean water, which it is known flows under the river bed, will be banked up and turned into the lower furrow.



This work is at present far from being completed, as the rock necessary for the foundation of the weir has not yet been reached close to the furrow.

Both furrows as well as the springs at Mackay's Pits are within the limits of the Municipality, and are controlled absolutely by the Town Council.

(2). (a) The cesspit system for the disposal of night-soil is almost universal. In a few instances the proprietors of houses have voluntarily adopted the pail system, and in some cases the owners of hire-rooms have been compelled to adopt it, but the opposition to the general introduction of the pail system is very great.

(b) There is no provision for the removal of slop-water by the Municipality. It is got rid of by being thrown into the gardens, cesspits, or yards of the different houses, or into the public streets.

This latter method of disposal is forbidden by the Municipal regulations, but the law is not rigidly enforced.

(c) Household refuse is removed regularly by the Municipal carts.

(3). The European death rate for the half-year ended 30th January, 1904, was 14.5 per thousand per annum.

The Native death rate for the same period was 54.6 per thousand per annum. A considerable proportion of the native deaths was caused by Gastro-Enteritis, which might have been caused by the use of impure water.

Annexed is a tabulated statement showing the number of deaths and the causes of death for both the European and native population for each month of the half-year.

#### Analysis of Causes of European Deaths.

		Jan.	Feb.	March.	April.	May.	June.	Total.
Bronchitis and Pneumonia	...	1	...	...	...	...	3	4
Gastro Enteritis	...	1	...	1	...	...	...	2
Enteric Fever	...	...	1	..	3	...	...	4
Heart Disease	...	...	...	1	...	1	1	3
Delirium Tremens	...	...	...	...	...	...	1	1
Acute Laryngitis	...	...	...	...	...	...	1	1
Congestion of Liver...	...	...	...	...	...	1	...	1
Premature Birth	...	...	1	...	3	...	...	4
Cancer ...	...	1	...	...	1	...	...	2
Tubercular Enteritis	...	...	2	...	...	...	...	2
Phthisis ...	...	...	2	...	...	...	1	3
Senile Decay	...	1	...	...	...	...	...	1
Total ...	...	4	6	2	7	2	7	28

## Analysis of Causes of Native Deaths.

			Jan.	Feb.	March	April.	May.	June.	Total.
Enteric Fever	...	...	...	...	...	...	...	1	1
Bronchitis and Pneumonia	...	...	7	4	7	5	7	21	51
Gastro Enteritis	...	...	14	8	4	...	3	5	34
Phthisis ...	...	...	4	...	2	1	6	...	13
Heart Disease	...	...	5	1	1	3	3	1	14
Marasmus	...	...	1	...	...	...	...	...	1
Senile Decay	...	...	1	...	1	...	1	2	5
Dropsy ...	...	...	1	...	1	...	...	...	2
Cancer ...	...	...	2	...	...	...	...	...	2
Apoplexy	...	...	1	...	1	3	1	1	7
Leprosy ...	...	...	1	...	...	...	...	...	1
Indigestion	...	...	1	...	...	...	...	...	1
Brights Disease	...	...	2	1	1	...	1	...	5
Retention of Urine	...	...	...	1	...	...	...	...	1
Convulsions	...	...	...	2	...	3	2	1	8
Asthma ...	...	...	...	1	...	...	...	...	1
Septic Thrombosis (Middle Ear disease)	...	...	...	...	1	...	...	...	1
Pertussis	...	...	...	...	...	2	4	2	8
Syphilis ...	...	...	...	...	...	1	...	1	2
Paraplegia	...	...	...	...	...	...	...	1	1
Laryngitis	...	...	...	...	...	...	...	1	1
Cystitis ...	...	...	...	...	...	...	...	1	1
Burning ...	...	...	...	...	...	...	...	1	1
Premature Birth	...	...	...	...	...	...	...	1	1
Total	...	...	40	18	19	18	28	40	163

From these tables it will be seen that there were four deaths from Enteric Fever among the European and one among the native population. These were the only deaths due to acute infectious disease.

There were seven cases of Small-pox or Amáas reported during the half-year, eleven cases of Enteric Fever, three cases of Continued Fever, and one of Scarlet Fever.

The cases of Small-pox were all mild, only natives being affected. Every case was treated at the Lazaretto, and kept under observation until the rash had entirely disappeared. All contacts were vaccinated or revaccinated. There were no deaths.

All the cases of Enteric Fever were treated at the patient's home or at the Midland Hospital, there being no distinct hospital for acute infectious disease apart from the Lazaretto.

I was able to secure blood from all three cases reported as Continued Fever, and to apply Vidal's test to the serum.

Two strains of active B. Typhoid were used. These were obtained from the laboratories of King's College, London, and the Royal College of Surgeons, Dublin.

In each case the patient had been ill for more than a week when the specimen of blood was taken, and in each case there was distinct clumping within fifteen minutes, when a dilution of the blood serum was made with twenty times its volume of an eighteen-hour old broth culture of B. Typhoid.

Control experiments with normal blood gave no clumping even when the specimens were allowed to stand for hours.

From these results it would seem that the cases of Continued Fever which from time to time have been notified as Remittent Fever, Malarial Fever, or Continued Fever, are really Enteric Fever, although the clinical features are frequently very different from true Enteric.

(4). A Sanitary Inspector, a Location Inspector and a Street-keeper are employed by the Town Council. The different parts of the town are systematically visited by these officials, and any infringements of the sanitary regulations are reported to the Medical Officer of Health, who takes the necessary steps to rectify the condition.



Overcrowding among the natives in the town itself is not nearly so bad since the Municipal hire-rooms have been built in the location, but in some of the hire-rooms in Hare Street and River Street a certain amount still exists. This is extremely difficult to prevent, as the native population is largely a floating one, and the natives themselves do not realise the evils of overcrowding.

There is practically no overcrowding among the European inhabitants of the town.

I regret to say that no specific steps have been taken for the past six months to in any way improve the sanitary condition of the town. Until the water-supply is increased it is difficult to see how anything can be done. A large proportion of the erfholders argue that so long as the supply of water brought into the town is insufficient for irrigation purposes, any application of this supply to other purposes than that of irrigation is short-sighted, illegal and unjust, as it would further diminish the productiveness of the vineyards and gardens on which a considerable number of the inhabitants of the town subsist.

(5). Rats and mice have diminished in numbers considerably in town since rewards were offered by the Town Council for their destruction.

(6). A Medical Officer of Health is employed whose duties are those laid down in the Public Health Amendment Act of 1897.

(7). Kraals and backyards are still used in town to keep stock.

The public shambles, which are outside the town and on the other side of the river, are badly kept. A well has been sunk close by to supply the shambles with water, but the supply is insufficient. Until a good water-supply, under pressure, is available, it is difficult to see how they can be improved.

The hotels and boarding-houses are without exception well conducted and cleanly kept.

The public bake-houses are clean and well conducted, the only drawback being that occasionally "brand-dam" water is used.

The condition of the location is unsatisfactory. The water-supply is obtained from a well sunk at the bottom of the steep slope on which the location is built, so that it is likely to be polluted by surface drainage into the well. There are no latrines except those attached to the new blocks of hire-rooms; here the pail system is in force. Since the appointment of a Location Inspector the place has been more neatly and cleanly kept, but pigs and stock are still permitted to roam about in an unrestricted manner.

The subjoined table gives the European and native births for the six months ending 30th June, 1904:—

	Europeans.		Natives.	
	Legitimate.	Illegitimate.	Legitimate.	Illegitimate.
January... ..	12	1	18	3
February ... ..	8	—	18	7
March ... ..	19	—	5	10
April ... ..	15	—	8	14
May ... ..	14	—	17	8
June ... ..	12	1	12	9
	—	—	—	—
Total ... ..	80	2	78	51

(ii) ADENDORP (MUNICIPALITY).

(1). This matter has been fully reported on in last year's report.

(2). Nil.

(3). The village on the whole has been remarkably free from infectious diseases.

(4). Nothing has been done in this respect since last year's report.

(5). Rats and mice are by no means abundant in the village and district. A reward was offered by the Town Council for every rat or mouse brought to the Town Office. This regulation, which still remains in force, has resulted in numbers of rats and mice being brought in.

(6). A Health Officer is employed who is paid for any services rendered.

(iii) NEW BETHESDA (MUNICIPALITY).

(1) (2) (4) (5) and (6). There has been no change since the 1903 report.

(3). No cases of infectious disease were reported during the half-year.



## GRIQUALAND EAST.

## KOKSTAD (MUNICIPALITY).

\*Report of Dr. A. J. H. THORNTON, Medical Officer of Health.

(1). Water-supply.—This matter has been fully dealt with in previous reports, and there has been no change since last year. The supply is adequate and pure, but sources of contamination are many. No serious cases of sickness, however, have been traced to it during the half-year.

(2). (a) Night-soil is removed by a service maintained by the Municipal Council for this purpose, which is effective in its working.

(b) Slop-water is not dealt with on any general plan. Most householders dispose of it in pits in their gardens.

(c) Household and other refuse is removed to a site on the commonage set apart for the purpose.

(3). Infectious diseases have not prevailed to any great extent. In the autumn there were six cases of Enteric Fever, one being fatal. Of these, two had contracted the disease in Natal and the other four locally.

Of Diphtheria there were two cases, both recovering under the use of Anti-toxin. There were also two cases of Small-pox dealt with during the period, both having contracted the disease before coming to Kokstad. These latter cases were quarantined in a small shed which has been fitted up for the purpose in what was once laid out as a Town Park, but which has not been used for that purpose.

(4). Remedying of Sanitary Defects, etc.—These matters are in the hands of the Town Overseer, who brings cases needing attention to my notice.

(5). Rats are not unusually prevalent; no disease has been detected among them, and no particular measures have been taken to exterminate them.

(6). A Health Officer is employed under the title of Borough Medical Officer, at an annual salary.

(7). During the six months 36 deaths occurred in the township from the following causes:—Infantile Diarrhœa, 3; Phthisis Pulmonalis, 5; Croup, 2; Tabes Mesenterica, 1; Anæmia, 3; Gastritis, 2; Premature Birth, 2; Enteric, 1; Pneumonia, 2; Convulsions, 4; Gastric Hæmorrhage, 1; Cystitis, 1; Gastro Enteritis, 1; Diarrhœa, 1; Child Birth, 1; Disease of Hip Joint, 1; Valvular Heart Disease, 1; Apoplexy, 1; Senile Decay, 1; Alcoholism, 1; Collapse, due to burns, 1.

## HANOVER.

## HANOVER (MUNICIPALITY).

\*Report of Dr. JAMES WILSON, Medical Officer of Health.

(1). Water-supply.—The water-supply of the village is derived from a spring within the Municipal area and a mile north-west of the village. The spring is covered over by a brick building and is under the control of the Municipal Council. The water is brought thence by a covered-in furrow 1,000 yards long to a "skepping dam" at the upper end of the village where the inhabitants used to get their drinking water. The surplus water is conducted about the village in open furrows for irrigation purposes. In ordinary times the supply is copious and is well over 200,000 gallons per diem, but owing to the prolonged drought it has suffered very considerably during the last year. There is no reason to suspect the purity of the water at its source, but it appears to be certain that pollution occurred in the course of the covered-in furrow, resulting in the outbreak of a very extensive epidemic of Enteric Fever in the village, as will be detailed afterwards.

(2). (a) Nightsoil.—There is a contract system of weekly removal of night-soil under the control of the Municipal Council. It is buried in holes dug for it over a mile east of the village. So far there is no duplicate system of buckets, and these accordingly have to be cleansed in the night.

(b) A few householders have private slop-water carts. The Council have had under consideration the advisability of procuring a Municipal slop-cart, but so far they cannot see their way to incur the expense it would entail.



(c) Household refuse is removed by contract from the bins in householders' backyards.

(3). Infectious Diseases—Enteric Fever.—A few cases of Enteric Fever occurred towards the end of December, 1903. During January, 1904, the outbreak became pretty general, and by the end of February was alarming in proportion. The Public Health Department was thereupon requested to investigate as to the cause, and Dr. Thornton arrived early in March. After careful examination of the sanitary condition of the village and special analysis of the water-supply both at the spring and at the end of the covered furrow, he came to the conclusion that the trouble arose from pollution of the drinking water along the course of the covered furrow. There had been some rain in December, and infected material had got washed off Dassie Kop, the base of which is skirted by the furrow. This determined the Municipal Council to renew their application to Government for a loan of approximately £2,000, which would enable them to lay down a system of piping to conduct the water from the spring and throughout the town. The Health Department promised cordial support of the application, but to our great regret, the Government stated that they were unable to come to our assistance. The Council, as advised by Dr. Thornton, had a small cistern with a tap built on to the furrow above the source of pollution, and householders were advised to procure their drinking water there. Many—both European and coloured—refused to go the extra distance, and continued to use the old “skepping dam,” so I advised the Council to lay a temporary two-inch pipe from the top end of the furrow to the “skepping dam.” This was done, and drinking water is now taken from it. Since the beginning of the outbreak, householders have been advised to boil all their drinking water, but very few adopted this precaution. Directly the cases were notified, the Council sent special buckets for the infected excreta, and these were emptied twice a week. Jeye's fluid was also freely supplied and advice and directions given for the disinfection of all infected materials. The epidemic attained its height in March. In all, 54 European and 32 coloured cases were notified within the Municipality, but there is reason to believe that many coloured cases were never brought under notice. The Municipal Council have now decided to raise money privately for the water piping scheme till such time as Government can come to their assistance, and tenders are now being invited for the work.

Diphtheria.—There have been three sporadic cases of Diphtheria, two European and one coloured; the two former were isolated at home, the latter quarantined by the Municipality. All were promptly treated with Diphtheretic Anti-toxin and made good recoveries.

Tuberculosis.—The large and increasing number of tubercular cases, especially among the coloured people, is a matter of much concern and will require constant supervision of their dwellings to prevent overcrowding. No infectious diseases hospital exists. The contagious diseases hospital, adjoining the gaol, belongs to the Government.

(4). The action taken to remedy sanitary defects in the water-supply has been detailed above. The ash-heaps round the village have been cleaned up, and the household refuse is now removed further from the village. The houses of the coloured people are periodically inspected to prevent overcrowding, and several tenements have been condemned as unfit for human habitation.

(5). Rats are not prevalent in the district of the Local Authority, and no disease has ever been found in mice.

(6). I was appointed Medical Officer of Health for the Municipality on the 1st March at the rate of £25 per annum. At my request the Council applied to the Medical Officer of Health for the Colony for, and obtained from him, a statement of the duties of my office.

(7). Vital Statistics.—Population: 309 European males, 335 European females; 288 coloured males, 300 coloured females.

There were 26 European births during the year and 20 deaths, being at the rate of 43.7 and 31.1 per 1000 respectively.

The coloured births numbered 27 and the deaths 67, or at the rate of 46 and 117 respectively per 1000. Six European children died under one year, and 15 coloured. The very high death rate among the coloured people is in large measure caused by the improper dieting during the Gastro Enteric and Typhoid outbreaks, and also by the improper feeding of infants. Enteric caused four European deaths and seven coloured. Gastro Enteritis is given as the cause in all of twenty-seven deaths. Twenty-seven deaths are referred to the organs of respiration; in six cases from tubercular affection.



## HAY.

## GRIQUATOWN (VILLAGE MANAGEMENT BOARD).

No report furnished.

## HERBERT.

## DOUGLAS (VILLAGE MANAGEMENT BOARD).

- (1) and (2). Nothing to add to last year's report.
- (3). Infectious diseases have not prevailed, but there is no hospital accommodation in the village for such, and the want thereof is at times felt.
- (4). Sanitation is under the supervision of a Sanitary Inspector, and dwellings are not overcrowded.
- (5). Rats are not prevalent in the village.
- (6). No Health Officer is employed.

## HOPE TOWN.

## (i) HOPE TOWN (MUNICIPALITY).

(1). The water-supply of the town is very good and is taken in pipes from the source of origin to a dam. This water is running day and night. The drinking water is caught from the pipes. The dam water is used for irrigating gardens.

(2). Nothing is known of sewerage in this village.

There is a big sluit at the west end of the town where all rubbish is thrown. Whenever it rains this sluit forms a small river, and all the rubbish is carried into the Orange River a mile distant.

Night-soil is carted away in buckets twice weekly. This system answers very well.

(3). No infectious diseases have come under my notice.

There is a hospital for contagious diseases which is small and badly built, and not at all what a hospital should be.

(4). Nil.

(5). Rats are not prevalent in the area of the Local Authority.

(6). No Health Officer is employed.

(7). Nil.

## (ii) STRYDENBURG (VILLAGE MANAGEMENT BOARD).

(1). Water within the area of the Local Authority is procured by the sinking of wells, and is reached at a depth of 20 to 60 feet, depending on the situation. Almost each erf-holder has a well, and water is drawn to the surface by means of windmills, and collected into reservoirs built of stone, lime, and cement.

The water is fairly good; owing to the drought the supply of water has become very limited, and boring in consequence has been put in operation by the Village Board, but without favourable results.

(2). Slop-water is disposed of by each householder. Night-soil and household refuse are systematically removed by contractor as usual.

(3). No infectious disease has been prevalent during the past year.

No infectious diseases hospital accommodation has been provided.

(4). No particular action has been found necessary; sanitary arrangements are being closely attended to.

(5). There are no rats in existence here.

(6). No Health Officer is employed at present.

## HUMANSDORP.

## (i) HUMANSDORP (MUNICIPALITY).

(1). Water-supply.—There is an abundance of never-failing spring water, which is conveyed to the town for all purposes in open furrows.

(2). Night-soil, slop-water, and household refuse are removed by contract and carted to a depositing site about three miles out of the town.

(3). No infectious diseases have been reported to this office, but accommodation therefore has been provided.



(4). The water furrows are regularly attended under the supervision of the Street Keeper.

(5). Rats are very seldom seen or discovered. They appear, however, to be on the increase—presumably brought from Port Elizabeth amongst packages.

(6). The District Surgeon acts as Health Officer. No special conditions are attached to his appointment.

(7). The general health and sanitation of this area are satisfactory.

(ii) HANKEY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply for both drinking and domestic purposes is drawn from the Klein and Gamtoos Rivers, which both run through the village. The supply is pure and sufficient. The water is conveyed to the village in open furrows.

(2). There is no system for the collection of night-soil and household and other refuse.

(3). There has been a slight case of Typhoid Fever, which was taken in hand by the District Surgeon and soon suppressed.

(5). There are no rats in this neighbourhood.

(6). No Health Officer is employed.

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JANSENVILLE.

JANSENVILLE (MUNICIPALITY).

(1) (2) (4) and (5). As last reported.

(3) Two cases of Diphtheria and two of Typhoid Fever were notified during the half-year.

(6). The District Surgeon is employed at a small salary to advise in cases of infectious diseases, but not to cope with an epidemic.

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KENHARDT.

KENHARDT (VILLAGE MANAGEMENT BOARD).

No report furnished.

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KIMBERLEY.

(i) KIMBERLEY (MUNICIPALITY).

\*Report of Dr. G. A. TURNER, Medical Officer of Health.

The following report on the sanitation of the district of Kimberley includes:—

The Mining areas.

The Municipality of Kimberley.

The Municipality of Beaconsfield.

The village of Kenilworth.

The village of Wesselton.

The village of Warrenton.

The village of Rosmead.

The Homestead, near Kimberley.

(1). Water-supply.—The principal source of water-supply is from the Vaal River, which may be said to supply (1) all the water to the village of Warrenton with the exception of that obtained from some dozen small wells. I may state that the people there take the water either direct from the river proper or from the irrigation furrow, and the Village Management Board have certain regulations, to as far as possible prevent the pollution of the water-supply.



Needless to say, such a source of supply is liable to contamination, but up to the present it cannot be in a very serious condition, seeing that the village is singularly free from Enteric Fever.

Below Warrenton, comparatively few people are supplied with the river water until one reaches the Kimberley Waterworks Company's intake, situated two miles below Riverton and forty-two miles below Warrenton; the Vaal River has for forty-seven miles above the Company's intake one tank within the Board of Health's jurisdiction.

The Kimberley Waterworks supply by far the greatest portion of the population of the district, including (1) Portion of the mining area; (2) Municipality of Kimberley; (3) Municipality of Beaconsfield.

The following is briefly the course of the water from the intake to the consumers:—The water at the intake is pumped into four sedimentation tanks on the bank of the river, capable of holding 2,000,000 gallons; from these tanks it is pumped through a 14-inch main to a point known as the Mid Station, situated ten miles from the river; it is there received into a reservoir of 1,500,000 gallons; from thence it is passed by a 14-inch main to the service reservoir on the outskirts of Kimberley, a distance of seven miles from the Mid Station and seventeen miles from the intake.

This reservoir has a capacity of 10,000,000 gallons; from it the water is distributed in two ways:—(1) An unfiltered portion for the use of street watering, etc., and certain private houses also receive unfiltered water. (2) By far the larger portion of the water is passed through the sand filters and thence into a clear water tank of 300,000 gallons, and then distributed in service pipes to the consumers.

This supply of water is at present sufficient; it has been periodically analysed in the Board of Health Laboratory, and though at certain periods of the year there is an increase in Albuminoid Ammonia, due to vegetable contamination, owing to the river ceasing to flow, and at other times, viz., after the first rush of flood water, there is an increase in Chlorine.

There has not within my limited experience been any sign, as far as chemical analysis can show, of gross animal pollution; at the same time there is some chance of pollution from the inhabitants washing on the banks of the river above the intake, and also from animals dying at the edge of the water; both these matters have at times received the attention of the Board of Health. Further, the water, as before stated, is filtered, and the public are repeatedly warned at times, when from any reason, the water has departed from the normal.

This brief account will show that the water-supply for the most populous part of the district is in as satisfactory a condition as can be reasonably expected.

Other sources of supply.—Besides the Vaal River, the Modder and Riet Rivers supply, to some extent, the inhabitants on their banks.

Wells.—Wells are the principal source of supply to the farms and outskirts of the townships, but further, there are a number of wells within the area supplied by the Waterworks Company, and these wells are an important factor, as they are the only source from which water can be obtained for the manufacture of mineral waters. I have inspected a number of these wells and analysed the water; as a rule they are in a satisfactory state.

The wells on some of the farms supplying milk to the town leave room for improvement, and in my opinion are a considerable source of danger to the public health.

Rain-water.—This may be a source of supply in a few cases, but the nature of the rainfall prohibits it being used to any great extent.

(2). Collection of Night-soil, Slop-water, and Household Refuse.—The Municipalities of Kimberley and Beaconsfield with the village of Kenilworth and Mines have the pail system for the removal of stercur.

Two installations of the Omega system of treatment of sewage have been tried in Kimberley. Needless to say any water carriage system for the disposal of sewage is absolutely out of the question under present circumstances.

Warrenton.—This village has a sanitary contractor who supplies a pail service for night-soil to some of the houses, but a number of the inhabitants dispose of their stercur in various other ways as they think fit. The night-soil, when collected, is deposited I think in as suitable sites as can be found under the circumstances.

Wesselton.—Chiefly disposes of its night-soil in cesspits, and no pail system exists, and as the village is dependent on its water-supply from wells, this practice is liable to become a nuisance and a source of danger.

Rosmead.—This village has no regular service, each householder disposing of his own night-soil and refuse.

Slop-water and Household Refuse etc.—In all populous parts of the district where householders cannot deal with their own slop-water or household refuse, the



Municipalities deal with them, the depositing sites being some distance from any human habitation, where they are no source of danger.

(3). Infectious Diseases.—The following cases were notified within the district:—

	Kimberley.		Beaconsfield.		District.		Total Kimberley, Beaconsfield and District.	
	E.	C.	E.	C.	E.	C.	E.	C.
Typhoid Fever ...	29	23	15	25	4	...	48	48
Scarlet Fever ...	2	...	...	...	...	...	2	...
Diphtheria ...	4	...	1	1	3	...	8	2
Erysipelas ...	5	9	1	8	1	...	7	17
Leprosy ...	1	2	...	2	...	...	1	4
Puerperal Fever ...	1	1	...	1	...	...	1	2
Chicken Pox ...	...	...	...	2	...	...	...	2
	42	35	17	39	8	1	67	75

The three Diphtheria cases occurring in the district were all reported from Warrenton.

In connection with all these cases, careful enquiries as to the possible cause of infection were made and all possible precautions under the circumstances taken.

The want of an Infectious Diseases Hospital for isolation purposes was felt.

The Board has a Thresh Disinfecter, and all infected linen is removed and thoroughly disinfected; rooms in properly built houses are disinfected with Formalin. Natives' huts are treated according to circumstances; where possible they are fumigated, in extreme cases they are burnt; in others they are thoroughly washed with a strong disinfectant. In cases where patients have not a change of clothing they are removed to the disinfecting rooms and given a bath while their clothes are disinfected.

The following is the work done in the six months:—(1) Rooms disinfected, 61; (2) sets of bedding and clothing removed to the Thresh, 36; (3) special sanitary pails supplied, 19.

Typhoid Fever.—This disease is admitted at the General Hospital, but in cases which are nursed at their own homes, the Board of Health supplies special sanitary pails for the reception of all discharges. These pails are removed by a special cart nightly, and are constantly inspected by the Board's Sanitary Inspector.

The cause of the majority of the cases of this disease was to be traced, in my opinion, to polluted surface water, the patients frequently getting water directly or indirectly from wells which are exceedingly difficult to trace.

Scarlet Fever.—Two odd cases of this disease occurred, the cause of infection not being traced. The disease was of an exceedingly mild nature, and it is more than probable that other cases equally slight existed but were not recognised, no medical man being called in.

Diphtheria.—Of the ten cases notified of this disease there seemed to be undoubtedly some connection with poultry yards; except in the case of one family, there seemed to have been no communication between the infected persons.

Leprosy.—The European afflicted with this disease had been ill for some time; full inquiries were made concerning him; he was removed to Robben Island. One native woman was found in a hut, but the disease in her case appeared to be in a quiescent state, and, as it was evident she would die shortly, no attempt was made to have her removed, as she would undoubtedly have died on the journey to Cape Town. I may state she, as predicted, died within a month or so of discovery.

The remaining cases need no comment; they were natives from whom no history was obtainable.

In dealing with this disease great difficulty is experienced, owing to the fact that there is no place where Lepers pending removal to Robben Island, can be housed and looked after, and, as it takes months sometimes before the necessary



authority for removal arrives from Cape Town, it not infrequently happens that the patient escapes in the interval, so that all the work of medical men is wasted, and a fresh area becomes infected with the disease. Not only is the danger of the spread of disease increased under existing circumstances, but it is a great hardship that educated patients, who have made up their minds to the wrench of parting from a wife and family, should have the departure postponed indefinitely in this way, until they naturally argue that there is no necessity for removal at all.

Erysipelas.—It became apparent during 1903 that the number of cases of this disease was very numerous, and that the disease was increasing, and was likely to become a source of danger to the general public. Consequently the Board gave instructions that an inquiry should be made on the subject, and a report submitted to the Medical Officer of Health for the Colony, with a view to the disease being made notifiable; this was accordingly done, and on April 12, 1904, Erysipelas became a notifiable disease. It was only then that the real extent of the trouble became known, and steps could be taken to deal with it properly. Full inquiries were started with the view of discovering the cause and true nature of the outbreak. At present it can only be stated that the vast majority of cases are of the facial type, some exceedingly severe, one or more deaths having occurred, and the disease is contagious.

A further report on the subject will be submitted in due course.

Puerperal Fever.—Inquiries were made concerning the European patient suffering from this disease; a certified midwife had been employed who, in my opinion, was not responsible for the trouble.

Of the two coloured cases little can be said. They occurred in native huts, where probably every married woman in the vicinity with a family considered herself an accomplished accoucher, and gave her assistance accordingly.

Chicken-pox.—The two cases of this disease occurred in one of the nine compounds, and were isolated and treated there.

Infectious Diseases Hospital.—No Infectious Disease Hospital has been provided. At times patients found in a destitute state, with no place of abode, and suffering from an infectious disease, are put in private houses at the expense of the Board; this proceeding is all that can be done under the circumstances, but is very unsatisfactory.

(4). Sanitary Defects Remedied.—Water.—The water-supply, as before stated, has been under careful supervision by the Board's Official.

Nuisances.—The Chief Sanitary Inspectors for the Municipalities of Kimberley and Beaconsfield have inspectors under them continually making house to house examination, and any accumulation of household refuse when found is reported to them, and dealt with at once; I may add that the removal of house refuse must be very thoroughly carried out, as, in the course of my many inspections of premises in connection with infectious disease, I have only found one house where rubbish had not been removed, and in this case it was undoubtedly the fault of the occupier.

Overcrowding.—The Chief Municipal Sanitary Inspectors have night inspections made from time to time of premises where overcrowding is suspected.

The Sanitary Inspector for Kimberley has instituted proceedings for overcrowding in 248 cases. Further than this houses unfit for human habitation have been dealt with.

Prevalence of Rats.—The safety of the general public is certainly endangered by the number of these animals in certain populous parts of the district, principally in blocks of buildings containing forage, etc., which is brought up from the Colony.

The following action is being taken for the extermination of these animals:

The Board of Health pays the sum of threepence for each rat and one penny for each mouse; these rodents are taken to the Kimberley Municipal Fire Station, where they are received by a Municipal Official (who is paid £1 per week by the Board over and above his regular pay, for the work). The rats are put into pails with lids; any rats which are reported as having been found dead are specially marked, and details as to where they were found, etc., are taken; all the rats are then sent to the Board's Laboratory for examination.

Up to the present there have been no rats dying of any disease as far as can be ascertained.

The following number of rats were received up to June 30th:—January, 301; February, 515; March, 469; April, 308; May, 253; June, 132; total, 1,978.

There were also received during the six months 2,825 mice. These numbers are exceedingly low, and, though placards on the subject pointing out the danger which existed from rats have been posted over the district, very little interest in



the subject can be roused, and the extent of the rat population is not being materially decreased in any way.

(6). The Medical Officer is an Official of the Board of Health, and has to employ his whole time in its service.

(7). Plague Precautions.—On the news of the outbreak of Plague in Johannesburg being received in Kimberley a special meeting of the Board was called, and the following precautions were decided on and carried out:—

Examination and destruction of rodents.  
 Inspection of train passengers from the Rand.  
 Surveillance of passengers from infected places.  
 Inspection of goods from Johannesburg.  
 Inspection of locations.  
 Supply of Prophylactic.

About these precautions I need only state that the surveillance of passengers was first taken in hand by the Municipal Officials of Kimberley and Beaconsfield, but afterwards, for various reasons, the Board had to employ a special inspector to do the work within the area of the Kimberley Municipality.

Passengers unable to provide a special address were detained in the quarantine camp for a period of ten days after their departure from Johannesburg, the Board supplying them with accommodation and rations during their detention; guards and attendants were provided.

Forty-one natives were detained; they were in all cases raw Kafirs who had not been in Kimberley before. Natives who could name some person who knew them, and who recognised them, or who were able to give an address, were allowed at liberty.

Any goods from Bramfontein Station which were liable to harbour rats, or which were liable to have been contaminated by rats, were detained at the goods sheds until they were inspected.

The locations were systematically and continually searched for sick persons not receiving medical attention, the Kimberley Location being searched by the Board's Inspector (Sanitary) while the Beaconsfield locations were attended to by the officials there.

No cases of Plague occurred, though the Medical Officer attended several *post mortems* on persons who had died suddenly, and about whom, owing to the sudden rush of the disease in Johannesburg, some doubt was entertained.

Burial of Bodies without any Medical Certificate.—During the six months thirty bodies have been buried for which no medical certificate has been obtained; that is to say, thirty persons have been buried, the cause of their death being unknown.

As these deaths in many cases occurred in the most thickly populated part of the district, comment on the subject is unnecessary.

The Board has already had full reports on the matter sent to the Health Department.

#### (ii) BEACONSFIELD (MUNICIPALITY).

This township is included within the area reported upon by the Kimberley Municipality.

#### (iii) WARRENTON (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived chiefly from the Vaal River, which flows along the whole length of the village.

Some of the water is lead out in an open furrow which runs through the town, and many people use this water for drinking. The supply is adequate and pure.

(2) (a) Night-soil is collected by a sanitary contractor and deposited in a hole about a mile from the village.

(b) Slop-water is not collected.

(c) Household and other refuse is taken to a spot well outside the village (or used in gardens as manure).

(3). Infectious diseases prevailed to a very limited extent. Two cases of Typhoid occurred during the half-year; these were under control of a medical man, and no further cases have appeared. Three cases of Diphtheria appeared in May, but the families (two adjoining) were isolated, and no further outbreak took place. There is no Infectious Diseases Hospital accommodation here.



(4). In view of a possible outbreak of disease amongst natives in the location here, this location has been broken up and a new one formed at a spot about one mile from the village, on a site chosen by the District Surgeon of Kimberley.

(5). Rats are unknown here.

(6). No Health Officer is employed.

## KING WILLIAM'S TOWN.

### (i) KING WILLIAM'S TOWN (MUNICIPALITY).

\* Report of Dr. H. M. CHUTE, Medical Officer of Health.

(1). Water-supply.—The rainfall during the six months, January to June, 1904, was 14·08 inches; the number of days on which rain fell was 42, and of the 14·08 inches, 11·70 fell in January and February, and during the other four months 2·38 inches fell. There has, however, been a sufficient supply. Filter beds and settling tanks are needed.

The new water scheme is still being further improved by replacing the old 6-inch pipes with new 10-inch pipes.

The native locations of Ginsberg and Tsolo are now supplied from the Town Service, and the people are no longer dependent upon the river and furrow for their supply of drinking water.

(2). Sewerage and Drainage.—The drainage scheme is still in steady progress; most of the streets are laid with good stone drains and concrete channels, and this deals effectively with storm and bath water.

No system has yet been instituted for the removal of slops, the only available method being to scatter them about the ground or pour them into the gutters; the soil around dwellings is thereby continually polluted with these dangerous fluids, causing, I am convinced, much Enteric Fever and Diarrhoea.

(3). Enteric Fever.—The number of European cases from January to June has been 35, as compared with 39 for the same period of 1903.

During the year special attention has been directed to the prevalence of Enteric Fever in the town. I made an analysis of the cases that had occurred during the years 1901, 1902, and 1903. From this table it appeared that Enteric Fever occurred most frequently in the low-lying portions of the town, where the subsoil soakage was greatest. It rarely happened that many persons in the same house were affected, a circumstance affording strong probability that the water supply cannot be held responsible. The Gaol inmates enjoy a remarkable freedom from Enteric Fever, although cases may be numerous in the town. There are very few places in the town, if any, where so many people are congregated day by day in relatively so small an area as at the Gaol, yet Enteric Fever is unknown among the prisoners.

The water-supply is the same as the town. There is, however, an entire absence of soil pollution, the drainage being as good as possible, and this I believe to be the secret of the freedom of the inmates from Enteric Fever. I do not think that the town will ever be free from Enteric, until the continual pollution of the soil by the present method of disposal is abandoned.

During the prevalence of Plague in 1903, there was a very remarkable diminution of the number of cases of Enteric Fever. This I believe to have been due to the destruction of the micro-organisms in the soil by the thorough methods of disinfection adopted, chief of which was the drenching of the soil of suspected spots with strong Perchloride of Mercury solution. Wherever practicable, disinfection of the soil with this agent is now being carried out in neighbourhoods where Enteric cases occur, and it will also be used in the disinfection of gutters and drains; it will be interesting to note if this course will have any influence in diminishing the number of cases.

(4). Overcrowding.—This occurs only in houses where natives live. It is very difficult to entirely prevent its occurrence so long as natives are permitted to reside in the town. From time to time surprise night visits are made and precautions taken on discovery. By the Census figures of April, 1904, the number of natives living in the town is 1,631.

Slaughter Houses.—The Council has decided during the coming year to erect a central abattoir, fitted with all recent improvements, and provided with a good



water supply, by which the defects of the present unsatisfactory buildings will be removed.

Locations.—The new Ginsberg Location is extending; the huts are large and roomy, well ventilated and built on a definite uniform plan, with good space intervening between, and it is hoped in time that this new location will supersede the old ones, which are becoming overcrowded. No new huts will be permitted to be built in the old locations.

Cemeteries.—There is one cemetery available for all classes, creeds and races. It is situated favourably, so that its drainage cannot affect the river water, and it is admirably managed by a Burial Board.

The abatement of nuisances is dealt with by due inspection of the town by two Sanitary Inspectors; flagrant breaches of the Sanitary Bye-laws frequently occur, and proceedings are instituted.

(5). No case of Plague has occurred since 1903, and no plague-stricken rodents have been found.

(ii) BERLIN (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from a spring in the village. It is pure and not liable to pollution, but inadequate. People resort to their private tanks.

(2). There is no scavenging system in this village. Each household attends to its own night-soil, etc.

(3). There has been no infectious disease since the last report.

(4). No improvement has been made as to sanitary defects.

(5). Rats do exist in this village, but not to an alarming extent so as to necessitate an official extermination.

(6). No Health Officer is employed by the Board. Cases of infectious disease are at once reported to the Magistrate.

(7). The health of the inhabitants is good.

(iii) BRAUNSCHWEIG (VILLAGE MANAGEMENT BOARD).

No alterations have been made since last year's report.

No cases of infectious disease have been reported.

(iv) BREIDBACH (VILLAGE MANAGEMENT BOARD).

No important alterations have been made since the last annual report.

(v) FRANKFORT (VILLAGE MANAGEMENT BOARD).

(1). The source of the water-supply is springs which form into a running stream. The water is pure and is taken from the stream by householders.

(2). Night-soil is disposed of in the usual way.

(3). Small-pox again made its appearance in this area, the outbreak having been treated by the District Surgeon. The inhabitants have been vaccinated, and up to the present date no fresh cases have been reported to this Board.

(5). Every step is taken to have rats destroyed.

(6). The District Surgeon attended the Small-pox patients.

(vi) HANOVER (VILLAGE MANAGEMENT BOARD).

(1). The water-supply for the village is obtained from the Yellow River and springs and underground water tanks. The water is good and not liable to pollution, but is insufficient.

(2). There is no scavenging system in this village, wherefore each household attends to their own night-soil.

(3). The health has been good and no case of Fever or any other infectious disease has occurred. No hospital accommodation has been provided.

(6). No Health Officer is employed.

(vii) KEISKAMA HOEK (MUNICIPALITY).

(1). The water-supply is obtained from a river by open furrows, and is very pure and abundant for domestic use and irrigation purposes, but liable to pollution in consequence of a great number of natives being located along the rivers from which the town supply is obtained and over which the Town Council has no control,

being beyond the limits of the Municipality. It is, however, the intention of the Council to bring the same under control under the provisions of Sub-section 2, Section 17, of the Public Health Act of 1897.

(2). No system has been introduced up to the present for the disposal of night-soil, slop-water or refuse. Regulations are being framed by the Council to meet all cases.

(3). Several cases of Small-pox have broken out amongst native landowners' families within the Municipal area. Patients and all suspects were quarantined some miles distant from the town under medical attendance, and huts, bedding, and wearing apparel were thoroughly disinfected. Otherwise the general health has been very good.

(4). Bathing, washing of clothes, and pollution of water of all rivers under the jurisdiction of the Town Council has been strictly prohibited.

(6). No Health Officer is appointed.

(viii) PEELTON (VILLAGE MANAGEMENT BOARD).

(1). The water-supply of Peelton is in most cases procured from two streams known as Yellow Woods and Nkwebu Rivers, both flowing through the village.

(2). No action has been taken to remedy any sanitary defects other than prohibiting the washing of clothes or bathing in the rivers. No other sanitary arrangement is necessary here as all refuse is generally thrown on to lands as manure.

No important alterations have, therefore, occurred since the report for 1903.

(ix) PIRIE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply of this village remains in the same condition as reported on last year.

(2). There is no system for the disposal of night-soil and slop-water. The removal of household and other refuse has been carried out better than formerly.

(3). There has been no outbreak of infectious diseases during the half-year.

(4). No action has been taken for the abatement of nuisances. Anyone found polluting the water-supply is punished by the Board.

(5). The inhabitants have been instructed to exterminate rats as far as possible.

(6). No Health Officer is employed.

(x) 'UMNXESHA (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is from the river 'Umnxesha and is carried to the dwellings by means of buckets and barrels.

The source belongs to, and is under the control of, the Local Authority.

The water is copious and pure, but during an extended drought the river does not run and the water is polluted by washerwomen, and by cattle, horses, etc., drinking in the river.

(2) and (3). Nil.

(4). Washing in the river has been forbidden.

(5). Rats and mice have increased very much during the half-year, but as yet no steps have been taken to exterminate them.

(6). No Health Officer is employed.

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KNYSNA.

KNYSNA (MUNICIPALITY).

\*Report of Dr. GEORGE MARR, Medical Officer of Health.

With regard to headings (1) and (2) there is nothing fresh to report beyond what is contained in last year's report.

(3). There have been a few sporadic cases of Diphtheria which were isolated, and in no case did the disease spread. There were two deaths from this cause. One case of Scarlet Fever was notified.

(5). Payment for destruction of rats ceased on the 28th of May, and doubtless the place will soon be as infested as before.



## KOMGHA.

## KOMGHA (MUNICIPALITY).

(1). The Water-supply is ample, the source being a spring with a good steady flow situated on the town lands. There are two smaller sources of supply on other parts of the commonage which are also in use. The quality is excellent, and all the springs are under the control of the Town Council. Private tanks and cisterns for the collection of rainwater are also used. There is no artificial distribution from the public springs, the water being taken direct from the outlet of the spring and conveyed for domestic use in buckets and water barrels.

(2). No system exists of collection and disposal of either (a) Night-soil; (b) Slop-water; or (c) Household or other refuse. Each dwelling possesses a water-closet or privy, generally at a portion of the garden remote from the house. The privy usually consists of a deeply-sunk square excavation, which is used until filled up, when it is covered over, and a fresh excavation is made; this serves as a receptacle for slop-water. Household refuse, consisting of ashes and house sweepings and all other sorts of solid refuse are conveyed to sites on the commonage set apart for the purpose and deposited away from where it is possible for harm to be done.

(3). There has been no serious outbreak during the half-year. One fatal case of Diphtheria occurred which was treated at home. No hospital accommodation has been provided.

(4). This Municipality has only recently come into existence, the first meeting of the Town Council having been in March last. The bye-laws framed by the Council for dealing with sanitary matters have not yet been proclaimed by Government, and Municipal action is thereby retarded.

(5). Rats are not considered unduly prevalent. No steps have been taken by the Council for their extermination.

(6). Owing to the absence of authorised Municipal Regulations a Health Officer has not yet been nominated, but any complaints as to nuisances are attended to by the Town Clerk, and the Resident Magistrate and Chief Constable render assistance.

(7). Committees of the Town Council take cognisance by personal inspection and otherwise of the condition of the water-supply, and its purity, as to rubbish deposits, overcrowding of natives, and the condition of the native location. A Borough Ranger has been appointed from 1st September, 1904, but until confirmation of the bye-laws, it is not considered expedient to resort to judicial measures for enforcement of any sanitary requirement.

## LADISMITH.

## LADISMITH (MUNICIPALITY).

(1). Water-supply.—This village is supplied with water from the mountain source, and the stream is conducted by means of an open furrow about three miles long to the reservoir above the village. Drink water is supplied by means of a complete pipe system, every property being provided with a tap. The stream flows into a concrete tank above the town, keeping the same filled to overflowing, and the overflow is collected in a large reservoir for irrigation purposes.

The supply is adequate, and judging from the absence of Fever and other infectious diseases, seems to be pure. The only danger of pollution lies in the wash from the hillside in the event of heavy rains. The stream rises on Crown land, but the whole length of the furrow is under the control of the Municipality.

(2). Sanitation.—In regard to sanitation the condition of the village is anything but satisfactory. This Municipality was placed under the operation of the Act 45, 1882, by Proclamation dated the 6th November, 1903. Immediately thereafter a Municipal Council was elected and regulations and bye-laws were drafted, passed, and submitted for approval in the usual way. After a lapse of several months the regulations were returned with the suggestion that a fresh set should be framed and submitted. This was done and the new set was submitted in the early part of last month, and is still awaiting approval.

In the absence of the necessary bye-laws and regulations the Council is absolutely powerless to enforce measures of sanitation and general improvement, and

the unaccountable delay at headquarters in connection with the establishment of proper bye-laws is not only disheartening for the Council, but has also led to a condition of perfect lawlessness and disorder. The old regulations are superseded by the proclamation of November, 1903, and as long as the new rules are delayed the disorderly condition in this Municipality must continue.

In view of the alarming outbreak of Fever in adjoining divisions, and the appearance of Enteric in some parts of this division, the establishment of rule and order in this community and the application of proper sanitary measures, such as provided by the regulations submitted for approval, is certainly a matter of the utmost urgency.

(ii) VAN WYKSDORP (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—This is derived from a spring which is situated within the area and is under the control of the Village Management Board. The water is distributed from the spring in open furrows and is liable to pollution.

(2). No special regulations have been adopted for the removal of night-soil, and no steps have been taken for the disposal of slop-water.

(3). No infectious disease has been prevalent during the half-year.

(4). No action has been taken to remedy any existing sanitary defects.

(5). No steps have been taken for the extermination of rats.

(6). No Health Officer is employed.

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MAFEKING.

MAFEKING (MUNICIPALITY).

(1). The water-supply is in the hands of a private company. During the past year the Company have made fresh cuttings which has resulted in a better supply than hitherto. Further, the separate water scheme recently opened up by the Rhodesian Railways, Ltd., for the supply of the railway camp has not only resulted in a more satisfactory supply in the railway camp, but it has enabled the local water Company to more satisfactorily meet the demands of the town proper. Reference may be made to last year's report, which stated: "The Council desire to run an opposition scheme, but are advised that their powers under Municipal Act 45, of 1882, do not permit this. It is hoped that during the next Session extended powers will be granted to Municipalities to meet the defects found in this Municipality."

The source of the supply is springs situate two miles from the town, and just outside the Municipal area. The water is conveyed partly by an open furrow and partly by pipes. The supply is pure.

(2). Night-soil is removed by contract, and is deposited at sanitary pits nearly two miles away from the town. Arrangements have been made for planting the depositing sites with pepper trees.

(3). As has been the case for some time past, Mafeking has been practically free from infectious disease. The lazaretto has been inspected and found to be in order in case of need.

(4). The outbreak of Bubonic Plague in Johannesburg led the Council to take every possible precaution. This was thought to be particularly necessary in view of the close business connection of Johannesburg with the Mafeking district. The C.C. and R.M. co-operated and arranged for police supervision at the border. A special temporary Sanitary Inspector was appointed, as was also a Vigilance Committee who made house to house inspections. Generally the town has considerably benefited by the precautionary measures adopted. It is to be regretted that the Government refused to refund or share the expense incurred by the Council, in fact the assistance rendered by the Government to the Council in connection with this threatened outbreak were indeed meagre. Fortunately, however, the disease did not make its appearance in this district.

(5). Since the military visited these parts, rats, which in the past were practically unknown, have been occasionally found. The forage imported during the war probably introduced rodents. Sixpence per head is paid for the destruction of these animals, and in this way they are being exterminated.

(6). In terms of the Public Health Act the District Surgeon acts when necessary as a Municipal Health Officer.



## MALMESBURY.

## (i) MALMESBURY (MUNICIPALITY).

\*Report of Drs. WERDMULLER and HAUMAN, Medical Officers of Health.

(1). Water-supply.—The main water-supply is from wells, artesian and surface, and also to some extent from tanks. The wells, artesian and surface, belong chiefly to, and are under control of, the Municipality, and are all situated within Municipal bounds.

(a) The artesian well water is collected and stored in tanks of cement and galvanised iron, and distributed by means of pipes. This water is fairly pure.

(b) Surface wells.—Water is drawn up by buckets in the case of the surface wells belonging to the Municipality, and is liable to pollution from surface drainage. In private surface wells, water is drawn up by pumps, and being covered, are in consequence less liable to pollution than those under charge of the Municipality.

(2). (a) Night-soil is collected in sanitary buckets and removed once a week for burial to dumping grounds sufficiently far removed from the inhabited area, where deep trenches are made for the reception thereof, and covered with a few inches of soil. In cases of infectious diseases, where necessary, separate buckets are provided for the discharges, which are removed and disinfected daily.

(b) Slop-water.—No provision is made by the Municipality for collection or disposal of this, and each householder has to dispose of it without creating any nuisance.

(c) Household and other refuse are collected in boxes by the householders and removed twice weekly under direction of the Municipality to places outside the inhabited, but within the Municipal area.

(3). Infectious Diseases.—Thirty cases of Enteric were notified during the half-year with two deaths. One case of Small-pox occurred, which, along with the contacts, was isolated at the quarantine camp. Several cases of Whooping Cough, Measles, and Mumps were also notified, and four of Diphtheria. Tubercular disease claims a large number of victims, especially amongst the coloured population, on account of overcrowding and insufficient ventilation, and it highly desirable not only on this account, but also on account of their general filthy habits, to have them removed to a location where provision as to overcrowding could be more strictly supervised as well as cleanliness enforced by the Inspectors of the Local Authority.

The number of deaths was 46, classified as follows:—

	Males.	Females.
European ... ..	5	6
Coloured ... ..	18	17
	—	—
Total ... ..	23	23—46

And due to—

Tuberculosis and Tubercular Meningitis ... ..	9
Tuberculosis Pulmonium ... ..	3
Broncho Pneumonia ... ..	3
Pneumonia ... ..	1
Whooping Cough, Pertussus ... ..	2
Cerebro Spinal Meningitis ... ..	2
Convulsions ... ..	2
Premature Birth ... ..	1
Old Age ... ..	2
Diarrhœa and Gastro Enteritis ... ..	9
Cholera Nostra ... ..	1
Enteric Fever ... ..	2
Peritonitis ... ..	1
Marasmus ... ..	3
Thrush ... ..	1
Cystitis ... ..	1
Others ... ..	3
	—
Total ... ..	46

The Tubercular death roll is thus about 33 per cent.

\* Forwarded by Municipality for publication.

## (ii) DARLING (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is good, and is obtained chiefly from tanks which are private property. The tanks are all galvanised iron, except about half-a-dozen, which are cement. There is one public well in the place.

(2). Night-soil is removed by contract. Manure and household rubbish are removed privately to spots appointed by the Local Board.

(3) In the course of the year Whooping Cough broke out in the school. There have been about three cases of Typhoid Fever and Chicken-pox among the village children.

(4). It is proposed to do away with the cattle pond and put up mangers.

(5). There are no rats in this district.

(6). No Health Officer is employed.

## (iii) HOPEFIELD (VILLAGE MANAGEMENT BOARD).

(1). The report furnished by the Board with regard to water-supply for the year ending 31st December, 1903, still holds for the six months ending 30th June, 1904, with this exception, that the Board has represented to the railway authorities the danger of the spring at Oude Kraal's Fontein being polluted—the same being open—requesting them to enclose the spring, and at the same time to make provision at or near the said spring for the supply of water to the coloured people in the neighbourhood, who have latterly had access to the spring. The spring supplies the railway station and the greater part of the eastern half of the village with water, and though slightly brackish and containing perhaps sulphides and condemned as bad by the Additional District Surgeon, the Board is unable to report any cases of Fever, Diphtheria, etc., during the last six months—January to June, 1904. No outbreak of disease has been traced to a polluted supply of water in the area under the jurisdiction of the Board during the above-mentioned period. The tanks or underground cisterns in the eastern half of the village were constructed before the water-supply from Oude Kraal's Fontein to that part of the village was laid on by pipes, consequently the construction of said tanks or cisterns were not due to the alleged bad water. The entire absence of disease in the village speaks for itself.

(2). (a) The collection and disposal of night-soil are now engaging the serious attention of the Board. Suitable pails are being ordered, and the removal of the same will be done by cart or waggon and no longer left to the individual.

(b) Slop-water as usual is thrown out in the yards or gardens, which are spacious.

(c) Household and other refuse goes to the manure heap, whence it is removed to the gardens and lands.

(3). No infectious diseases have been recorded by the Board during the six months ended 30th June, 1904. Phthisis is still prevalent amongst the coloured people in an unusual degree. No infectious diseases hospital accommodation has yet been provided.

(4). Sanitary defects, if any, are not serious. When necessary, proprietors or occupiers are ordered to remove accumulations of filth and noxious matter, and, failing that, legal proceedings have been taken. There is little or no overcrowding in the village. In some cases the houses of the coloured people might be cleaner, and in the event of any infectious disease breaking out, segregation, whitewashing, and disinfectants are resorted to.

(5). Rats are unknown in Hopefield.

(6). No Health Officer is employed by the Board.

(7). Buildings have lately been erected on plots two or three hundred yards below the burial ground. Wells are dug, and the owners have applied to the Board for the closing of the burial ground in question. The above matter, with particulars, is being submitted by the Board to the Medical Officer of Health for the Colony for his opinion, which will be final.

## (iv) MOORREESBURG (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived mostly from wells and tanks. There are no springs. A new well has been dug for washing purposes and for watering cattle, by the Village Management Board.

(2). Night-soil, slop-water, and household refuse are carted away by contract and deposited outside and below the village.



(3). One case of Amaas occurred which was at once isolated in a hut outside the village.

(4). Whenever any accumulation of filth occurs, the offending party gets notice to have the same removed.

(5). There are no rats in this village.

(6). No Health Officer is employed. The members of the Village Management Board, of whom one is a medical practitioner, look after the sanitary condition.

(7). The assistance of Government is required in boring for water, as the present supply is brackish.

(e) RIEBEEK KASTEEL (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from surface water which is collected in a dam, and distributed by open furrows, but not under the control of this Board. The supply belongs to the Dutch Reformed Church. The water-supply is inadequate and pure.

(2). The night-soil and other refuse are collected in pails, and the householders are allowed to remove these themselves.

(3). No infectious diseases prevailed, and so far no hospital has been required.

(4). There is not much overcrowding here. There is a dam which is used for washing, and the smell from this dam is a nuisance in summer. This dam belongs to the Dutch Reformed Church. The Church is unwilling to allow the dam to be under the control of the Board.

(5). There are no rats in this area.

(6). No Health Officer is employed.

(f) RIEBEEK WEST (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from wells. Each owner of an erf has his well, and many have aerometers. The source is not under the control of the Local Authority. The water is pure and not liable to pollution.

(2). Each owner is responsible for the removal of night-soil on his premises. Buckets are used and night-soil is buried.

(3). No infectious diseases have occurred.

(4). The Board has appointed a man to go about the place now and then and to report any serious defect.

(5). No rats are ever noticed.

(6). No Health Officer is employed.

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MIDDELBURG.

MIDDELBURG (MUNICIPALITY).

(1). The water-supply is derived (a) from a public well on the Market Square; (b) from private wells; (c) from rain water tanks. The river water derived from springs in the river runs through the town in open furrows and is used for irrigation and household purposes. The supply is adequate, but the water is liable to pollution. Recently a bore hole has been sunk on the commonage which yields a sufficient supply of drinking water, and the Local Authority has applied for a Government loan not exceeding £10,000 to enable them to initiate a scheme for storing and supplying this water in pipes. The Government, not being at present in a position to assist, the matter must of necessity stand over.

(2). Night-soil is removed under the duplicate bucket system once a week from private houses and more frequently from schools, hotels, boarding houses, and such like. Slop-water is removed daily, household and other refuse weekly. The three services are being performed by the Municipality.

(3). An infectious diseases hospital is provided jointly by the Municipality and the Divisional Council. The disease of Small-pox which was prevalent during 1903 has been stamped out. There were no cases during the half-year.

(4). There is but little overcrowding, and the Sanitary Inspector deals with cases when they occur.

(5). There are not many rats here. When discovered they are dealt with by the inhabitants.

(6). No special Health Officer is employed. The District Surgeon attends to cases of infectious disease.

(7). The completion of the proposed water scheme is absolutely necessary for the health of this area.

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MOLTENO.

MOLTENO (MUNICIPALITY).

(1). The water-supply is derived from the sources on the farm Paardenkraal. It has been seriously reduced owing to the continual drought and insufficient rains throughout the last year.

The Town Council has augmented this supply by boring on the Town Commonage as advised by Field-Inspector Raymer of the Public Works Department. In addition to the borehole in use since last year, which has continuously been supplying the town, the Council has sunk other boreholes now yielding a good supply.

The windmill pumping plant has been replaced by an oil engine pumping plant, and the town is now supplied with good, pure and wholesome water. The Town Council is cognisant of its grave responsibility as regards providing an efficient water-supply, and the work has been vigorously prosecuted regardless of expense. The Council hopes to complete its water works within the next six months, when the township will be better supplied than has been the case in previous years.

(2). The daily removal of slop-water, weekly removal of stable litter, ash and rubbish, and the bi-weekly removal of night-soil within the limits of the township, and disinfecting of the receptacles are still in force and strictly carried out by the Council.

(3). The health of the inhabitants generally has been better than in previous years.

Some cases of Typhoid Fever were reported and the Council took prompt and stringent measures, as advised by its Medical Officer, to arrest the progress of the outbreak in its first stages.

(6). No regular Health Officer is engaged, but when needed the District Surgeon is called in.

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MONTAGU.

MONTAGU (MUNICIPALITY).

(1). Water-supply.—The source arises on a piece of Municipal land called Keurkloof, from whence it is conveyed in iron pipes to the village at a distance of about  $2\frac{1}{2}$  miles. The supply is adequate and perfectly free from pollution.

(2). Night-soil is collected during the hours from 10 p.m. to 5 a.m. at least once every fortnight and oftener when required, by means of a sanitary cart with tank, and conveyed to the place appointed for the disposal thereof, and emptied into a well-constructed and covered pit.

Household refuse is collected weekly, and where necessary oftener, and conveyed by cart to a distance of about one mile from the outskirts of the village.

(3). Prevalence of infectious diseases.—Thirty-eight cases of Diphtheria and three of Enteric Fever have been reported by medical practitioners between the 1st of January and 31st August, 1904.

Hospital accommodation has been provided on the outskirts of the village in the highest part.

(4). The enforcement of regulations framed under Section 7 of the Public Health Amendment Act, 1897, has been carried out.

(5) Rats are not prevalent in this district.

(6). The Council does not employ a Health Officer.

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MOSSEL BAY.

(i) MOSSEL BAY (MUNICIPALITY).

(1) and (2). No change since report for 1903.

(3). Twenty-three cases of Enteric, twenty-one cases of Typhoid, and three cases of Diphtheria have been notified during the half year. In cases where an outbreak has occurred a thorough inspection of premises has been made, and special pails for slops, etc., and disinfectants supplied.



(4). In case of any nuisances, a notice is served to abate same. Surprise visits at night by the Sanitary Inspector are made to prevent overcrowding, etc.

(5). Rats are paid for at the rate of 3d. for each rat brought to the Town Hall. 4,693 rats have been destroyed during the half-year.

(6). The Town Council has no Medical Officer of Health.

(7). Several streets have been drained and improvements made to existing drains. Water has been laid on to the location, which adds to the cleanliness of the inhabitants.

(ii) HERBERTSDALE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply which is derived from the river was in abundance during the half-year, and pure in quality.

(2). Night-soil, slop-water, and refuse are carted away to a certain place pointed out by the Board.

(3). No infectious disease has prevailed during the past six months.

(5). This village is not troubled with rats.

(6). No Health Officer is employed, such being unnecessary for this place.

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MURRAYSBURG.

MURRAYSBURG (MUNICIPALITY).

(1). Water-supply.—This is derived from three sources, viz.: (a) Springs in the Buffels River situated on the adjoining farm Vleiplaats. The water runs along the river bed for a distance of about two miles, where it is dammed up and then brought into town by an open furrow about one and a half miles in length, which, of course, is liable to pollution. It is mostly used for irrigation purposes, and fails totally in times of drought. (b) Wells, both public and private. The Council and private persons were compelled to resort to these wells—generally with the assistance of windmills—on account of the failure of spring water. (c) Tanks: Rain water thus collected is exclusively used for consumption.

(2). Cesspools are principally in vogue, which also provide a means for the disposal of slop-water. Household and other refuse is removed by a Municipal contractor employed for the purpose.

(3). Infectious diseases.—There has been no severe epidemic for some years past, and such cases as have occurred were of a very mild form, very few deaths having occurred.

(4). The Council causes frequent inspections to be made of all premises, privies, furrows, dams, etc., and takes immediate steps against all defaulters.

(5). Rats have not been observed to prevail in the district of the Local Authority.

(6). No Health Officer is employed by the Local Authority.

(7). The general state of health of this area is very satisfactory, and will compare favourably with most other towns.

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OUTSHOORN.

(i) OUTSHOORN (MUNICIPALITY).

\* Report of Dr. R. M. TRUTER, Medical Officer of Health.

(1). The water-supply remains as already frequently reported upon, a pure constant, sufficient, direct supply. It has been further distributed to more out-of-the-way places in the town.

(2). Street Cleansing and Refuse Collecting.—The work of this department has increased considerably. Four teams are employed in this department, and they carry out systematic collection of all refuse every twenty-four hours from the more

congested portions of the town, and every forty-eight hours from the outlying areas. The return of the work based upon a monthly average gives a total of 5,494 loads deposited on the tip during the year.

**Slop-collection.**—Owing to the rapid growth of the town, this work has greatly increased. There are at present three carts employed on this work, but a fourth will soon be put on. The return based upon a monthly average shows 330,767 gallons carted out of town for the year.

**Night-soil Removal.**—This important branch of work of the sanitary department requires much improvement. There are 1,711 dwellings and 440 other buildings in the township, of which only 667 are under the Municipal system. The remaining dwellings are served by private contractors, a very undesirable system.

The return shows (based upon the monthly average) 36,571 pails removed during the year. The poorer classes are unable to pay 1s. per removal, and ought to be met in some other way. The Municipal tip has become a stretch of fertile land, which when planted with trees will prove a valuable asset.

(3). Zymotic diseases are on the decrease. The following cases have occurred:—Typhoid Fever, 20; Scarlet Fever, 7; Puerperal Fever, 5; Diphtheria, 59; Measles, 9; Leprosy, 3; Dysentery, 2; Phthisis, 20; Military Tuberculosis, 3; Erysipelas, 4; Cerebral Meningitis, 1. Precautionary measures taken are as in last report.

During the half-year one case of Small-pox occurred; the spread was checked by vigorous operations; the patient was removed to the isolation camp, all contacts quarantined and re-vaccinated, and bedding, clothing, etc., thoroughly disinfected. In the absence of a steam disinfecter, the Council has provided a 40-gallon boiler for disinfecting purposes. An infectious diseases department, in connection with the Royal South-Western Hospital, is very desirable.

In connection with plague precautions 44 trains have been met, and 168 persons arriving from plague-infected parts have been watched for the necessary period. Thirty-two special pails have been provided for infectious cases, and 61 rooms fumigated.

Three cases of Glanders occurred; the animals were destroyed and the premises disinfected.

Redwater occurred at one dairy, where the milk supply was temporarily stopped.

(4). During the half-year the work of the sanitary department has been carried out with less trouble owing to the increasing willingness on the part of both owners and tenants to comply with notices and requests.

Overcrowding is an existing evil, but in many cases it would be cruel to enforce the standard cubic space, owing to poverty and scarcity of houses. A number of dilapidated premises have been done away with, and in some instances replaced by suitable buildings.

The location, so-called, consists of 48 huts, nearly all unfit for habitation. The occupants, the majority of whom are either sick, lame, or wasters, number 216; 60 male adults, 51 female adults, 51 male children, 54 female children. A proper native location is desirable.

**Cowsheds.**—There are at present 46 licensed dairies, with 15 sheds, accommodating 117 head of cattle. These are frequently inspected, and have been greatly improved.

**Stables.**—There are 110 stables, accommodating about 263 animals; improvements have been, and are gradually being made for better accommodation.

**Bake-houses.**—There are at present four bake-houses. They are on the whole fairly well kept, and are frequently inspected.

**Butchers' Premises.**—There are 15 butchers' shops. They are regularly inspected. Three were ordered to be closed until necessary improvements were carried out. One butcher has been convicted for the sale of unsound meat. The establishment of slaughter-houses is on the *tapis*.

**Factories and Workshops.**—One brewery, one harness factory, one tannery, four flour mills, three mineral water factories, one saw mill, one cement pipe works, one carriage builder, three waggon builders, three tobacco factories, two printing works, twenty-five feather-sorters' places, and forty-nine other trades are established here.

**Public Washing.**—This work, which plays such a vital part in the health of the town, and is doubtless responsible for a large percentage of infectious cases, is still carried on in the crudest manner. It is safe to say that 75 per cent. of the washing is done under suspicious circumstances, such as impure water, bad drying grounds, in undesirable premises. The Municipality is trying to raise a loan to establish proper wash-houses.



## (ii) CALITZDORP (VILLAGE MANAGEMENT BOARD).

\* Report of Dr. LAURENCE F. McDOWELL, Medical Officer of Health.

(1). The water-supply is derived from Nels River, which arises from the Zwartberg Mountain, about 14 miles from this village, and from Smits River, which joins Nels River about six miles above the village.

Along the course of these two rivers there are several farms, and frequently all household washing is carried out in the river bed, which a few months ago accounted for an outbreak of Enteric in this village.

In the village, and under the control of the Village Management Board, water runs in open furrows, etc.; these, as far as possible, are kept free from pollution, but one occasionally sees cattle, or horses, or even pigs in these furrows. A few inhabitants use tanks for catching rain water, but in dry seasons, furrow or river water is used, and in very dry times shallow wells are sunk in the river bed from which all water has to be obtained.

(2). (a) Night-soil is removed once a week by the bucket system, and deposited in a deep hole at a safe distance from the village.

(b) Slop-water is thrown out at any convenient spot.

(c) Household refuse, etc., is carted away once weekly beyond the village.

(3). During the half-year there were fifteen cases of Enteric in the village and the farm Buffelsvlei, which occurred owing to Enteric-soiled clothes being washed in Nels River about eight miles higher up.

There were three or four cases of Diphtheria, but the disease was prevented from spreading by, as far as possible, isolating patients, and prophylactic inoculations being used for other members of the families.

There is no Infectious Diseases Hospital accommodation, and it is often quite impossible to isolate a case, when a large family live in two or three rooms.

(4). The Village Management Board appoint an Officer to inspect and to report any case of infringement of their rules.

(5). There are no rats here.

(6). A Health Officer is employed to assist the Village Management Board in improving sanitation, and to report and give advice on any health question when called upon.

(7). The Village Management Board has a small piece of the farm Buffelsvlei under its jurisdiction, and the other, and larger part, which adjoins it is not included. Now I think it most important, and an urgent necessity, that considerably more of the farm Buffelsvlei should be included in their jurisdiction. The Village Management Board has done an immense amount of good in the way of improving sanitary defects, abolishing cesspools, putting bridges over furrows within their area, while within a few yards none of these precautions exist, with the result that pollution of furrows, and rubbish lying everywhere is a constant menace to public health and a disgrace to a civilised community.

## (iii) DYSELDOORP (VILLAGE MANAGEMENT BOARD)

No alterations or improvements have been made since last report for the year 1903. There is nothing particular to report on.

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 PAARL.

## (i) PAARL (MUNICIPALITY).

(1). The township of Paarl has a good and abundant water-supply coming through pipes from the two reservoirs within the Municipal area, one of which has been lately renovated and supplied with a concrete bottom.

(2). All household and other refuse is taken to places (by the owners) pointed out by the Council.

As soon as the sanitary regulations, drawn up and approved of by the Council, are sanctioned by Government, steps will be taken to have all household and other refuse collected and removed by Municipal dust and slop carts to places pointed out by the Council.

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\* Forwarded by Municipality for publication.

(3). The following notifications of infectious disease were made during the half-year:—Five cases of Diphtheria, by Dr. Retief.

(4). All streets, sluits and sidewalks are regularly swept and cleaned, and carts kept to have the filth brought to places pointed out by the Council.

(6). A Sanitary Inspector is appointed to inspect all places and report on same at every Municipal meeting. Dr. Gadow has been appointed as Medical Officer of Health for the Paarl Municipality, in the place of Dr. Krakowsky (resigned). He commenced duties on 1st September, 1904.

(7). The Council intend raising a loan of £20,000 for a storm water drainage scheme at the Paarl.

#### (ii) FRENCH HOEK (MUNICIPALITY).

The report for this area for the half-year ended 30th June, 1904, is materially the same as that of last year. Some five cases of infectious disease have been reported, but by proper isolation at home these have been stamped out without the disease spreading further.

#### (iii) WELLINGTON (MUNICIPALITY).

(1). The water-supply is pure, and is obtained from the Spruit River, and is carried for two miles in pipes into the reservoir on the boundary of the Municipality, from which it is supplied to the inhabitants through iron pipes. The supply is adequate and pure, having its source in the Hawequas Mountains some miles out of town. The source is not under Municipal control.

(2). Night-soil, household and other refuse are regularly removed out of town.

(3). A slight outbreak of Enteric Fever occurred in the town; prompt measures were taken with regard to the same. No Infectious Diseases Hospital accommodation has been provided.

(4). Any sanitary defects found have been remedied.

(5). Rats are prevalent, especially in the rivers; steps have been taken to poison them, and the Council pays 3d. for each rat brought to their Office.

(6). No Health Officer is employed, the District Surgeon acting as such.

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#### PEDDIE.

#### PEDDIE (MUNICIPALITY).

The health of this town during the half-year ended the 30th June, 1904, has been good.

No alterations have been made in regard to the health and sanitary arrangements of Peddie since last report.

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#### PHILIPSTOWN.

#### (i) PHILIPSTOWN (MUNICIPALITY).

(1). As reported last year, the water-supply is obtained from a strong spring on the town commonage, and conveyed for irrigation purposes in open galvanised iron furrows. The water for domestic purposes is drawn from an Abyssinian pump, although several householders use private tanks for rain water.

The spring referred to is situate on the immediate outskirts of the town, and is inadequate for irrigation purposes during the summer months. The supply for domestic purposes is abundant.

(2). The pail system was introduced some time ago, and is satisfactorily carried out. Excrement is carried away by a contractor twice a week. Household and other refuse is likewise carried away twice a week. Both excrement and refuse are deposited at a safe distance outside the limits of the town.

(3). Very few cases of infectious diseases have prevailed. No Infectious Diseases Hospital accommodation exists.



*(ii)* PETRUSVILLE (MUNICIPALITY).

(1). The water-supply for drinking and household purposes is permanent, pure, and ample, and is obtained from a spring situate above the township on a much higher level. A sufficient number of hydrants has been erected in different parts of the town, and the general drinking supply of water is now conveyed direct from the fountain in a 4-inch pipe to a reservoir, and thence in 2-inch pipes to the said hydrants. The supply in the pipes cannot become stagnant or polluted, owing to an arrangement to take water from the 4-inch pipe for the supply of the town, and return the remainder or overflow (which is continually running) to the reservoir, which is then used for irrigating the village erven, the number under cultivation being about 200. The entire fountain is enclosed with stone and cement, and the top roofed in to enable it to be regularly cleaned, which is done once a week. It has to be entered from the top by means of a trap-door and ladder placed inside; this trap-door is always kept locked. Owing to these precautions, it follows that no pollution of the drinking water can possibly take place, and, therefore, the inhabitants can always depend upon receiving a pure supply, which fact, it is thought, justifies the large expenditure incurred by the Council. The whole water supply of the town is within the area and under the control of the Municipality.

(2). The disposal of excrement is done by contract twice a week and deposited at a safe distance outside the limits of the town. The tub system is compulsory, and answers well. The Municipal cart goes round twice a week and takes all household refuse to a site selected for that purpose, a considerable distance off. The sluit, on the outskirts of the town, which was formerly used as a depositing site for rubbish, has been abolished.

(3). The general health has been very good. Eight cases of infectious disease were reported during the half-year. In order to cope with outbreaks of infectious diseases, especially among the coloured folk, an isolation hospital has been established under the management and direct control of the Municipality.

(4). No sheep or goat kraals are allowed within the township, and kraals used for other purposes have to be cleaned and all foreign material or loose matter removed once a week, and disinfected once a month. Privies, backyards and stables are inspected twice a week; butchers' shops and similar premises once a week; and any defects in sanitary arrangements are at once reported to the Municipal Clerk.

The town has been kept in a fair state of cleanliness, and the sanitation, as carried out, is considered satisfactory and sufficient for the present requirements of the population.

(5). There are no rats in this area.

(6). The District Surgeon acts as Health Officer for this Municipality, when so required.

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 PIQUETBERG.
*(i)* PIQUETBERG (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is still in perfect order. It is a limited supply, but is fetched direct out of the rocks by means of pipes, and brought down to the village by a main pipe, out of which private leadings go to several houses.

The fountain on the north side of the town is also in perfect order, and the water is taken out of it by means of a pipe and collected in a cement tank, from where private leadings go to several houses.

(2). Disposal of Night-soil.—The Board has engaged a Kafir, who goes round daily and collects night-soil. In some case, however, it is buried deep on the premises instead of being taken out of the village, but this is due to every house having a large piece of land lying waste, and on such land night-soil is being deposited.

(3). There have been no cases of infectious disease this year.

(5). Rats are totally unknown in this village.

(6). The Board employs no Health Officer who draws a salary from the Board.

(7). The Kafir location is now out of the village, and only very few native houses are still in the village, and those natives own property.

*(ii)* PORTERVILLE (MUNICIPALITY).

There is nothing to add to previous reports sent in, to which reference should be made.

## PORT ELIZABETH.

## (i) PORT ELIZABETH (MUNICIPALITY).

(1). Water-supply.—The water of Port Elizabeth is derived from Van Staaden's at a distance of 30 miles to the west of the town, where a storage reservoir is situated, capable, when full, of holding 30,000 gallons of water. The reservoir is supplied by several small streams and the water is filtered before delivery. This supply is supplemented by a pumping station four miles lower down the Van Staaden's Valley, where the water is pumped from a small reservoir into the leading mains between the above-mentioned reservoir and the town. The supplies are outside the area of the Municipality, and the water is conveyed through the town by cast iron mains. The purity of the water is satisfactory, and with care and great economy the quantity available has been found sufficient for the actual needs of the town. New works, calculated to supply 1,500,000 gallons per day, situated at the Sand, Palmiet, and Bulk Rivers, are now well in hand. The works are expected to be completed in about four years, but water delivered in the town 18 months from date.

(2). Scavenging and Disposal of Excrement.—Until the increased water-supply referred to above is available, the Municipality are compelled to prohibit new water closets, especially as the town is only partially sewered, which defect, however, it is proposed to remedy by the execution of a comprehensive sewerage scheme in the near future. Full surveys and preliminaries are now in hand for the preparation of this scheme. At present the pan system is in operation, the tubs being collected in covered wagons, and the material taken some considerable distance from the town where it is buried in trenches.

Refuse Disposal.—The refuse collected in the town is carted to railway sidings, tipped into trucks, and under agreement between the Cape Government Railway and Harbour Board, run out to the drift sands at the south end of the town, where it is utilised by the Forestry Department for covering up sand, the area being subsequently planted.

(3). Extent to which Infectious Disease has prevailed and what steps taken for preventing and dealing with outbreaks thereof.—176 cases of infectious disease were notified during the period under review, classified as follows:—

Enteric Fever ... ..	120 cases.
Diphtheria ... ..	21 „
Bubonic Plague ... ..	20 „
Scarlet Fever ... ..	13 „
Leprosy ... ..	2 „

On the notification of a case of infectious disease, an inspection is made of the premises where such has occurred, and notices are served for the rectification of any remediable sanitary defects. Printed instructions are left with the householders for their guidance in dealing with the disease. Enteric Fever cases are provided with special sanitary pails. Special hospital accommodation is provided for cases of Plague and Small-pox.

(4). Action to remedy sanitary defects and to prevent or limit the occurrence of preventable diseases.—The following notices were served and the nuisances abated for the half-year under review:—

To remove accumulations of filth or rubbish ... ..	583
To cleanse premises ... ..	235
To provide for the removal of slop-water ... ..	90
To close and cease using cesspools ... ..	14
To erect new privy ... ..	53
To repair privy ... ..	94
To cleanse privy ... ..	43
To effect repairs to premises ... ..	46
To demolish or cease using insanitary apartments ... ..	68
To cease carrying on business so as to be a nuisance ... ..	7
To cease keeping animals so as to be a nuisance ... ..	51
To abate overcrowding ... ..	12
To level yard surface ... ..	16
To provide efficient ventilation ... ..	3
To provide receptacles for household refuse ... ..	10
To have stable floors laid in concrete ... ..	16
To cleanse and repair drain... ..	3
To cease storing foodstuffs in bedrooms... ..	22



Eight insanitary dwellings were closed by order of the Council.

Four insanitary dwellings were demolished by order of the Council.

Sixty-five prosecutions were issued for the contraventions of the Health Regulations, resulting in 55 convictions being obtained.

(5). The Extent to which Rats are Prevalent in the District.—This information is supplied to the Government by the Plague Administration Board.

(6). A qualified Medical Officer of Health, holding a Diploma in Public Health, is employed by the Local Authority. He devotes part of every day to the duties of the appointment and performs duties similar to those laid down by the Local Government Board in England.

(ii) WALMER (MUNICIPALITY).

\*Report of Dr. T. L. BLACKBURN, Medical Officer of Health.

(1). The water-supply is rainwater collected in tanks, and is practically non-liable to pollution.

(2). Night-soil.—This is collected in the tub system and is buried in the bush, far enough away to be free from danger to health.

Slop-water.—This is mostly used on gardens. Household and other refuse is burned.

(3). Infectious Diseases.—For the half-year ending June 30th, 1904, Walmer has been wonderfully free from infectious diseases. There has been no further outbreak of Enteric Fever since that reported in last year's report. There has been a slight epidemic of Mumps and two cases of Plague, which occurred in Emslie's Location.

There is no Infectious Diseases Hospital in Walmer, but cases of Plague are looked after by the Port Elizabeth Plague staff and treated at the lazaretto there.

(4). In cases of accumulation of filth and noxious matter, overcrowding, and habitation of unhealthy or dangerous dwellings, the usual course has been to give those responsible due notice to remedy the defect, and if this is not done in reasonable time, the Municipal Authorities do it themselves at the expense of those responsible. The removal of the slaughter houses which I recommended in my last report has not yet been carried out, but I understand negotiations are in progress which in a short time should effect this much desired improvement.

(5). Rats are not very prevalent in Walmer and no special steps are now taken for their extermination.

(6). A Health Officer is employed by the Municipality. He is paid for any time spent on Municipal work.

(7). I would again draw attention to the need of removal of Emslie's Location. The only two cases of serious infectious or contagious disease in the last six months occurred there, and as it stands practically on the boundary line between Port Elizabeth and Walmer, it is a standing menace to the health of both places.

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PRIESKA.

PRIESKA (MUNICIPALITY).

(1). The water-supply of this village is derived from a spring situated about a mile from the village. It is properly covered in, and the water is led therefrom in pipes to taps in the village for domestic purposes, and into furrows for irrigation. The water is absolutely pure and reliable, as has been proved in the last drought.

The Council has the sole control over this fountain.

(2). Night-soil is disposed of by contract in a very satisfactory manner. The bucket system is in general use.

(3). With regret it must be stated that Syphilis is spreading fast amongst the natives living in the location, and is rapidly becoming a danger. The only means of isolating them at present is by removing the sick to huts a little way from the location, and as there is no proper hospital, nor supervision made, they naturally move in and out amongst the people, and are a threatening danger to the village and public at large.

The Council wish strenuously to urge upon Government the necessity of building a proper hospital in which to isolate these people, and thus remove this source

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\* Forwarded by Municipality for publication.

of danger from the village and district, and in fact the Colony at large. The Council has at various times suggested to the authorities the necessity of isolation by way of a compound built of stone walls, but up to the present nothing has been done in the matter and the disease has been left to spread at random, and has now assumed such an aspect that immediate steps are necessary; a fact that can be gauged at its proper value is, that only two weeks ago the coloured servants of one of the hotels here were found to be suffering from this disease, and the Council is now considering the advisability of shutting down the location and forcing the inhabitants into the district from whence the greater number of them have in the first instance come, as the Council considers that there is no valid reason why the Municipality should be put to any expense at all in the matter. The District Surgeon is fully cognizant of the state of affairs, and will probably furnish any further information if required.

(4). A Sanitary Inspector is employed who inspects and reports to the Town Clerk, the latter of whom has power to take immediate steps if required.

(5). Rats are unknown; the only specimen of rodent here is the ordinary field mouse, and these are not plentiful.

(6). The District Surgeon is employed by the Council whenever required.

#### PRINCE ALBERT.

##### (i) PRINCE ALBERT (MUNICIPALITY).

(1). The water-supply of the village of Prince Albert is derived from a spring, which has its rise in the Great-Zwartberg Range, situate without the area of the Municipality. The water is conveyed in an open furrow and is considered ample insofar as the domestic wants of the village are concerned, but not sufficient for the purpose of irrigation.

(2). Night-soil, household and other refuse.—These are disposed of by removal and burial at a spot specially set apart by the Council.

(3). Not a single case of infectious disease has been reported.

(4). The remedying of sanitary defects is still engaging the attention of the Council, no money being obtainable at present.

(5). There are no rats in this village.

(6). The Council does not employ a Health Officer.

##### (ii) LAINGSBURG (MUNICIPALITY).

The village has been for the greater part of the year without any Sanitary Authority or Sanitary Inspector.

The majority of the yards and open spaces are never thoroughly cleaned, especially in the vicinity of the Berlin Mission and rooms adjoining this part.

The streets are untidy and dirty from want of being repaired, and rubbish of all sorts is allowed to collect.

(1). The water-supply is still derived from shallow wells and open sluits exposed to contamination of all sorts. In a few cases, rainwater tanks are used, which, however, are seldom properly cleaned.

(2). The removal of slop-water is not provided for, and the removal of night-soil by an authorised person is not enforced. The waggon which removes the night-soil is itself a nuisance and a danger to health, owing to the fact that the pails are not properly cleaned or tarred. There are insufficient closets to many houses and there are no means of enforcing the cleansing of buckets in order to minimise the nuisance to householders caused by the removal of night-soil.

#### QUEENSTOWN.

##### (i) QUEENSTOWN (MUNICIPALITY).

\*Report of Dr. T. F. TANNAHILL, Medical Officer of Health.

The health of the town during the half-year ended June, 1904, has been fairly satisfactory. There have been notified Enteric Fever, twenty-two cases; Diphtheria four; Small-pox, two; Chicken-pox, one; and Scarlet Fever, one. This number in no wise represents the morbidity of infectious diseases, as notification is practically useless on account of there being no Infectious Diseases Hospital to gather up the cases and limit the spread of infectious disease.

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No change has taken place in sanitary method; as it is, it is carried out satisfactorily. The water-supply remains as before, from reservoirs, reinforced by several boreholes, but the supply is inadequate and has become increasingly so for several years past until now, when the severe drought has shown the absolute failure of our water-supply, and the urgent need for a sound, adequate scheme, such as the projected Bongola water scheme.

Syphilis, Pulmonary Tuberculosis, and Enteric Fever have been very prevalent the former two being commoner amongst coloured people, and their increasing prevalence is positively dangerous to the Colony and demands urgent grappling with.

(ii) HACKNEY (VILLAGE MANAGEMENT BOARD).

(1). Water is obtained from the streams and springs which are all within the jurisdiction of the Board. The supply is not led either by furrows or pipes, but obtained from rivers and springs by the use of buckets. During the long droughts water is not sufficient and is greatly liable to pollution.

(2). There is no system for the disposal of night-soil, slop-water, or refuse. Each house has a place for the disposal of slops and refuse at some distance from the dwelling.

(3). No infectious disease occurred during the half-year ending 30th June, 1904, and there is no Infectious Diseases Hospital.

(4). People are instructed not to wash in the river above places where water is obtained for drinking and household purposes.

(5). There are no rats in this area.

(6). No Health Officer is appointed.

(iii) KAMASTONE (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained mostly from natural springs and small streams which run through our large area. The water for domestic purposes is carried mostly from the springs and streams by each individual for his or her private use. The supply this year has been generally inadequate. Care has been taken not to pollute the water.

(2). The Board designated certain places for the disposal of night-soil. Each household disposes of its own slop-water, household and other refuse at a far-off distance from the houses.

(3). There have been no outbreaks of any infectious disease during the half-year.

(4). No sanitary defects have existed during the half-year.

(5). Rats are not prevalent, and therefore no steps are taken for their destruction.

(6). No Health Officer is employed by the Board.

(iv) LESSEYTON (VILLAGE MANAGEMENT BOARD).

No report furnished.

(v) STERKSTROOM (MUNICIPALITY).

\*Report of Dr. J. B. CUMMING, Medical Officer of Health.

(1). The water-supply is obtained from an open furrow and is consequently very impure. At its source it is pure and sweet, and if means were adopted to keep it so, it would be very satisfactory as regards quality. The quantity is insufficient. The arrangements for storage are not satisfactory. The dam in the river washes away with each heavy rain.

(2). Excrement and household refuse are removed by cart.

The removal of slop-water is not provided for.

(3). There have not been many cases of infectious disease. Twenty-one cases of Typhoid occurred, one case of Scarlatina, and one case of Diphtheria. There is a lazaretto on the commonage.

(4). Drainage is defective, but an effort is being made to improve it in conjunction with the making of streets.

Cattle kraals are still permitted within the town.

(5). Rats are non-existent within the Municipality.

(6). A Health Officer is employed. He receives no remuneration at present.

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## (vi) WHITTLESEA (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—This is still derived as in the past. The source of the river is situated outside the area of the Local Authority. Water is drawn direct from the river for domestic purposes; water for irrigation is stored and collected by means of an open furrow leading from the river to a reservoir, and drawn from that by means of open furrows for the supply of the village. This supply is not used for domestic purposes, being liable to pollution.

(2). The disposal of night-soil, slop-water, and refuse is carried out as formerly, and the system works satisfactorily.

(3). There has been no infectious disease during the past six months, and it has not been thought necessary to take any steps under this head. No accommodation for infectious diseases has been provided.

(4). No steps have been taken to prevent pollution of water, as the only water-supply liable to pollution is that from the reservoir, which is not used for domestic purposes, and the only remedy for the prevention of this would be the laying down of pipes. This has been considered, but no steps have yet been taken. There is no overcrowding of dwellings and no accumulation of filth.

(5). At times there appear to be many rats in this area. The inhabitants, for their own sake, are trying to exterminate them and appear to be partly successful.

(6). No Health Officer is employed by the Local Authority.

(7). The general health and sanitation of this village are good.

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 RICHMOND.

## RICHMOND (MUNICIPALITY)

(1). The water-supply continues the same as formerly. The main supply is drawn from a spring opening at the side of the river bed at the upper end of the village, and is conveyed in open buckets to the various houses.

(2) (a). The pail system is in use. Householders have to pay 1s. 6d. per month for the emptying of their buckets by the Local Authority's contractor. Buckets are supposed to be emptied once a week, the dumping ground being about half a mile from the village.

(b) There is no regulated system of removal of slop-water. A few have invested in private tanks on wheels for this purpose. Those who have gardens behind their houses find there a suitable outlet for its disposal.

(c) The disposal of household and other refuse is fairly satisfactory.

(3). During the past six months, sixteen cases of Diphtheria, four of Typhoid, one of Enteric, and one of Puerperal Fever were reported. There is no hospital accommodation for infectious diseases.

(4). Sanitary defects are remedied as they occur.

(5). There are no rats here.

(6). The Town Clerk acts as Health Officer and receives his instructions from the Municipality from time to time.

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 RIVERSDALE.

## (i) RIVERSDALE (MUNICIPALITY).

(1). The water-supply is derived from a river and is led down into a reservoir in pipes, and from there also in pipes into the streets and private properties.

The source is owned by the Municipality, but is outside the area. The water-supply is constant and pure, and no contamination takes place in transit.

(2). The pail system is in vogue and night-soil is removed every alternate night. Night-soil is deposited in pits some distance from the town. These pits are kept covered.

Slop-water and household refuse are removed daily by the Municipality and deposited on a suitable spot outside the town, which deposit place is under the supervision of the Municipality. Refuse is burned periodically.

(3). There have been a large number of cases of Typhoid Fever and Diphtheria. Consumption is also on the increase among the coloured population. The Municipality are doing everything possible to improve the sanitary condition of the town.



Yards are inspected by the Sanitary Inspector and householders are made to keep their premises clean.

(5). There are no rats in the district of the Local Authority.

(6). No Health Officer is employed by the Municipality.

(*ii*) ALBERTINA (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—The water-supply is obtained from a spring situated within the area of the Local Authority. Conditions of the supply are the same as described in the last report.

(2) (*a*). Night-soil is collected by means of sanitary buckets and removed at night-time to a place pointed out by the Board.

(*b*). Household and other refuse is removed by residents to a place outside the village pointed out by the Board.

(3). No infectious disease has prevailed during the past half-year.

(4). No sanitary defects have been found to exist.

(5). Rats are not prevalent within the limits of the Board.

(6). No Health Officer is employed by the Board.

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ROBERTSON.

(*i*) ROBERTSON (MUNICIPALITY).

(1). Water-supply.—No alteration since last report.

(2). Up to the 30th June, the same system as reported last year was in force, but from that date the stercus contractor has now to remove all tubs from dwelling houses at least twice per month, for which the maximum charge is 1s. 6d. per month—extra removals being charged by special agreement, but not exceeding 9d. for each removal.

The night-soil is deposited about  $1\frac{1}{2}$  miles from the town, at places fixed upon by the Municipality. No arrangements are made for the disposal of slop-water, but household and other refuse is carted away twice a week to places set apart for that purpose, and situated some distance from the town.

(3). The health of the inhabitants generally has been very good during the past half-year, and with the exception of a few isolated cases of Typhoid there have been no infectious diseases.

Special inspections are made by the Sanitary Inspector of all premises where any case of infectious disease is reported by any of the medical practitioners, and thorough cleansing of the premises is made where the same is found necessary.

There is no Infectious Diseases Hospital.

Greater attention is being given to sanitation than formerly. The town is inspected every fortnight by the Sanitary Inspector and a report presented to the Municipality, who deal with all offences according to the regulations.

Special caretakers are employed to guard against the pollution of the water above the intakes, the only places where such pollution can take place.

(5). There are no rats in this district.

(6). A Health Officer has not yet been appointed.

(*ii*) LADY GREY (VILLAGE MANAGEMENT BOARD).

No report furnished.

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SIMON'S TOWN.

(*i*) SIMON'S TOWN (MUNICIPALITY).

\* Report of Dr. H. CLARKE, Medical Officer of Health.

During the half-year ending June 30th, 1904, the public health of Simon's Town was satisfactory.

(1). Water-supply.—I have little to add to my previous remarks on the subject. The supply is at present adequate, and suitably stored, and I am glad to say the Council is now going to fence the springs from which the bulk of the supply is derived.

(2). This town is rapidly becoming well drained by a system of pipe drainage. Night-soil is collected from houses, when sanitary pails are used, by the Municipal carts, and thrown into the sea. Household and other refuse is also collected and burnt.

(3). No serious outbreaks of infectious disease occurred beyond a few sporadic cases of Typhoid, Measles, and Scarlatina, of a mild nature.

(4). Sanitary inspection of the town is constantly going on, and filth is never allowed to accumulate. The owners of several tenements have been compelled to provide suitable sanitary conveniences and ventilation, and generally place their houses in order. Overcrowding, which is difficult entirely to prevent, does not exist to any great extent, and measures are frequently taken to prevent it.

(5). I do not think rats are very prevalent. The Council give a reward of 3d. for every rat destroyed.

(6). The Council employ me as their Health Officer. My duties are:—

“The Medical Officer to the Municipality is to keep himself informed as to all matters affecting the health of the Municipality.

“To inquire into the cause, origin, etc., of diseases occurring in the district, by inspection or otherwise. To advise the Council on all matters affecting the health of the Municipality.

“The Medical Officer shall, on hearing of an outbreak of any disease of a dangerous character, inspect the premises without delay, and if not satisfied that due precautions are being taken to prevent the spread of the disease, to advise such steps as may be considered necessary.

“The Health Officer shall advise as to diseased meat or fish that may be offered or exposed for sale, and have the same condemned.

“He has to advise the Council on any matters within the meaning of the ‘Public Health Amendment Act of 1897.’

“The Health Officer shall send in to the Council monthly a written report as to the health of the Municipality, and any other matters that he may consider necessary to report.”

#### (ii) KALK BAY-MUIZENBERG (MUNICIPALITY).

\* Report of Dr. J. J. BOLGER, Medical Officer of Health.

(1). The water-supply since April has been obtained solely from Dolman's Spring on the side of the mountain towards Retreat. It emerges at an elevation of 1,200 feet above sea level, and at a distance of about two and a half miles from Muizenberg. The spring was fenced and covered in, and the water entered the pipes immediately on its way to the service reservoir. It is of undoubted purity, and may account for the almost total absence of illness for several months past.

In March a commencement was made of the cleaning out and deepening of the storage reservoir, and 25,860 cubic yards of silt, earth, and vegetable matter have been removed; the capacity has been greatly increased, so that now when full it is estimated that the reservoir will contain  $26\frac{1}{2}$  million gallons of water.

The open furrow which led the water from the storage reservoir to the intake is being piped in.

A contrivance called the “tumbling-bay,” with a screen for arresting foreign matter, has been constructed in the course of the pipe track for the purpose of aerating the water as it passes on to the service reservoir for final distribution.

The closing in of this furrow removes a possible source of contamination, as the flower gatherers and others who frequent the mountain were well known to make free and general use of it, although it was situated within the Municipal fence surrounding the reservoir area.

(2). The same as in previous reports.

(3). There were two cases of Diphtheria, one case of Scarlet Fever, and eighteen cases of Enteric Fever. Seventeen of the Enteric Fever cases were reported in the month of May, none of the cases proving fatal. The seventeen cases were all traceable to one cause, polluted water from the reservoir, and the furrow, which was allowed to enter the pipes on the 11th of April.

An investigation was held into the outbreak, and an erroneous opinion arrived at that a certain Zulu named Futshane suffered from Enteric Fever while employed at the reservoir in March; this man was sent down on April 5th, and was seen by me on the 7th suffering from Orchitis. He had no appearance whatever of Enteric Fever then, and had only been sick for a few days. He was not re-employed there.



In May his blood and his urine were both twice examined for Enteric Fever, with negative results. He died in July, and a *post-mortem* examination made by the District Surgeon of Wynberg showed only evidence of old standing pleurisy, with no trace of any lesions pathognomonic of Enteric. I interviewed him in June after the publication of the report of the investigation, and could obtain no evidence from him confirmatory of the conclusion arrived at. The contractor who employed him and his compatriots who resided in the same hut as he did, testified that he was only ill for about ten days with the inflamed testicle.

(4). The main drainage material is now arriving from England; it is expected that the work will soon commence. The Municipality also contemplate the construction of filter beds at an early date for the purification of the general water-supply.

(5). The number of rats destroyed during the half-year was 1,452. They are numerous amongst the sand dunes and rocks adjoining the beach.

(7). Births and Deaths.—There were 56 births (19 whites and 37 coloured), and 24 deaths (10 white and 14 coloured), fifteen being of children under twelve months of age. Two adults were drowned.

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#### SOMERSET EAST.

##### (i) SOMERSET EAST (MUNICIPALITY).

(1). The town is supplied with water from springs rising on the Town Commonage, brought into and distributed throughout the town in pipes. The water is pure, and very little pollution can take place, as the whole area where the springs are is fenced in thoroughly. At times the supply is not adequate.

(2). The bucket system is in use. Removal of night-soil is done weekly by contract. Householders themselves remove all rubbish and deposit it at sites appointed by the Council.

(3) The number of infectious diseases was less than the previous year. On notification being received of any infectious disease the premises were thoroughly cleaned up, disinfectants being supplied by the Council, and a strict watch kept. The Contagious Diseases Hospital is the only hospital here.

(4). The system of weekly removal of night-soil having proved satisfactory, nothing further has been done. There is a Sanitary Inspector, whose duty it is to see that no overcrowding is allowed or premises used that are unfit for habitation.

(5). Rats within the town are becoming a great trouble. The Council tried to encourage their destruction by paying for them, but met with much opposition from the ratepayers, and therefore discontinued payment.

(6). No Health Officer is employed.

##### (ii) PEARSTON (MUNICIPALITY).

(1). The source of the water-supply is from the Vogel River, and is not under the control of the Local Authority, as it is situate without the Municipal area.

The water is collected by means of a dam constructed in the river, and is brought into town by means of an open furrow.

The water-supply is inadequate, not always pure, and liable to pollution.

It is the intention of the Municipality to take the necessary steps to bring the water into town by means of pipes, and, with the support of the Government, an adequate supply, both pure and free from pollution, can easily be had for a sum of from £1,000 to £1,500.

(2). Night-soil and slops generally are deposited in the ordinary earth or water-closets.

Household refuse is carted away by every householder at his own expense to a spot pointed out by the Local Authority.

(3). The following cases of infectious disease were reported:—In May two cases, and in June one case of Typhoid Fever, but in a very mild form, and were well cared for and properly isolated at home. There is no Infectious Diseases Hospital accommodation here.

(4). The town generally has, like all sparsely built country towns, been in a fairly clean condition during the year, so that no special steps had to be taken. But the placing of only one native location outside the town instead of native huts and hovels all about the town, and the immediate erection of suitable Government buildings, will greatly minimise the danger of outbreaks of Typhoid and dangerous and infectious diseases.

The public well has now received special attention, a windmill having been put up, and a suitable cement tank made for the convenience of the public.

(5). No rats have been reported as having been prevalent within the limits of the Municipality during the half-year.

(6). There is no Health Officer to the Municipality, there being no necessity for such an appointment just at present, the town being generally in a fairly healthy state.

(7). Airy Government buildings and an adequate supply of pure water for the town are necessities which call for immediate attention.

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#### STELLENBOSCH.

##### (i) STELLENBOSCH (MUNICIPALITY).

(1). Water-supply.—The town water-supply for domestic purposes is taken from the Eerste River, the reservoir being situated within the Municipal area, at a distance of about a mile and a half from the centre of the town.

From the reservoir the water is conveyed in cast-iron main pipes, and distributed throughout the town by means of branch lead pipe leadings.

The supply is more than abundant for the present consumption, and is under direct control of the Municipal Council.

The water is of an excellent quality, but, owing to a number of large farms and several labourers' dwellings along the river above the intake, the water is liable to be polluted by means of drainage, washing, bathing, etc. To get beyond pollution the Council had a Bill introduced into Parliament in order to obtain power to take the supply out of the river at a point about ten miles from the town. The Private Bill has successfully passed, and the Council is now engaging an engineer to prepare plans and specifications for asking tenders to have the "new water scheme" carried out as soon as possible.

(2). (a) Night-soil.—The night-soil is being conveyed by contract as often per week as deemed necessary and conveyed to a suitable spot situate about three miles from the town. The bucket system has taken the place of the cesspool system. Only in a few cases have cesspits been allowed to remain, being passed as satisfactory by the Medical Officer of Health.

(b) The slop-water is allowed to flow in only such drains as are properly paved out with hard bricks and cement, which drains are continually being flushed with clean water from the river.

(c) Household and other refuse is removed regularly twice a week by contract.

(3). The following cases of infectious disease during the half-year ending June 30th, 1904, have been reported by the medical practitioners.

Typhoid Fever: five cases, no deaths.. Diphtheria: one case, no deaths. Enteric Fever: one case, no deaths.

Prompt steps have been taken to prevent the spread of infectious diseases and sanitary defects have been remedied.

A suitable Infectious Diseases Hospital has been erected, and a Cottage Hospital called the Victoria Memorial Hospital is now completed.

(4). Proper steps have been taken to improve sanitary defects, e.g., insanitary drains have been paved with hard bricks and cement.

Overcrowding has been guarded against as far as possible.

(5). Rats are plentiful but no trouble is being spared to have them exterminated.

(6). Dr. J. H. Neethling, District Surgeon, is appointed Health Officer.

(7). Attention has been paid to butcheries, bakeries, and dairies.

##### (ii) SOMERSET WEST (MUNICIPALITY).

(1). The water at present used is obtained from various sources, open furrows, tanks, and a few houses are supplied through pipes. The major portion, however, comes into the village through open furrows from the river and has to be boiled before it can be used for household purposes.

Two or three water schemes have been under consideration and investigated, but nothing definitely decided upon.

(2). Slop-water, Night-soil, etc.—Owing to the absence of any proclaimed Municipal bye-laws, the Council has in consequence very little power or control over these matters, but wherever it is possible the provisions of the Public Health Act and Police Regulations are set in motion.



Fortunately for Somerset West the older portion of the township was laid out in very large erven, very sparsely built upon, and the inhabitants are in the habit of burying the night-soil on the surrounding land. The only terrace of houses is in the new part, Station Road, and these pay private people to remove the night-soil. When the regulations are in force it is proposed either to let the collection of these matters out by contract or do it departmentally.

(3). Infections Diseases.—The state of matters in this respect is unsatisfactory, as cases of Typhoid continue to crop up, which are, however, principally confined to the lower part of the village near the river, and although the immediate cause cannot be stated always, it is very generally held by the medical authorities that the water in that locality has much to do with it; otherwise the general health of the village is fairly good.

There is no hospital here, and most cases are isolated at home and watch kept on the infected portion and inspections made to see that the closets are daily seen to and disinfected.

(4). Measures for preventing diseases, overcrowding, etc.—Yards and premises are under regular and systematic inspection, and instructions given for the removal of any accumulation of refuse, etc., but the absence of Municipal bye-laws makes it very difficult to deal effectively with these and other matters.

(5). There are very few rats in this village owing, it is believed, to the very small amount of grain, forage, and stores of all kinds which are kept in stock.

(6). No Health Officer is employed by this Council.

#### (iii) SOMERSET WEST STRAND (MUNICIPALITY).

(1). Water-supply.—The water is taken from the Lourens River above the village of Somerset West, and the source is outside the Municipal area. From the intake the water is carried in pipes to the filter bed of the reservoir, a distance of three miles. From the reservoir it is distributed by pipes to the various houses. The supply is more than sufficient for the present number of inhabitants, and as the reservoir is fenced in with barbed wire fences, the water is free from pollution.

(2) (a) Ordinary sanitary pails are used in closets, and these are regularly removed by a contractor, and the night-soil buried in trenches, three feet deep.

(b) Slop-water is removed from the houses every morning and buried on the same spot as the night-soil.

(c) Household Refuse.—The Municipality has carts that go from house to house daily. The refuse is put in tins or boxes and left inside the yards, from where it is emptied into the carts and deposited on the same ground as night-soil and slops. This dumping ground is two miles from the populated part of the Strand.

(3). The following cases of infectious diseases have been reported:—Enteric Fever, 3 cases. Typhoid, 6 cases. Diphtheria, 2 cases.

There is no Infectious Diseases Hospital.

(4). There are no cases of overcrowding.

(5). Rats were very prevalent, but have been largely exterminated; the Municipality paid 3d. per head.

(6). There is no Health Officer employed.

#### (iv) GORDON'S BAY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is good, being derived from a mountain stream which rises in a spring. The water is collected in tanks and distributed by pipes. The supply is adequate and pure, and is under the control of the Board.

(2). There is no system for the collection and disposal of night-soil, slop-water, or other household refuse.

(3). No infectious disease has prevailed in this area during the half-year. There is no hospital accommodation.

(4). The chief action taken for the remedying of sanitary defects has been the cleaning out and laying down of water pipes, the cleansing of sluits, and the fencing in of the water-supply with barbed wire.

(5). The Board has rats trapped, and also offers a reward for rats caught.

(6). No Health Officer is employed.

## STEYNSBURG

## STEYNSBURG (MUNICIPALITY).

(1). The water used for domestic purposes is obtained from bore holes in the town and is pumped in galvanised iron pipes into tanks on the Market Square. The water is pure and very good. There is no possible means of pollution, and the supply is controlled by the Municipality. The supply is over sufficient.

(2). Night-soil is removed during the night as soon as the tubs are reported full.

Slop-water is taken away from the houses twice a week, but from boarding-houses and hotels daily. Refuse, ash and rubbish are dealt with in the same way.

(3). As regards infectious and contagious diseases, no serious cases have occurred with the exception of Diphtheria, which broke out occasionally, but was dealt with promptly; only one case proved fatal. There is no hospital accommodation.

(4). No overcrowding has been reported.

(5). No nuisance has been reported from rats and mice.

(6). This Municipality has a Sanitary Inspector, but no Medical Officer.

## STEYTLERVILLE.

## STEYTLERVILLE (MUNICIPALITY)

(1). The water-supply is obtained from wells, sunk to a depth of about 30 to 35 ft., the water obtained being the drainage of the Groot River, which runs on to the village, the supply whereof is fairly pure. The wells are as a rule all covered in, and not liable to pollution. The supply is adequate and sufficient for the wants of the place. Rainwater is collected in tanks from the roofs of houses, and is used generally for drinking and cooking purposes.

(2). The system of the collection and disposal of night-soil is the dry earth closet and pail system. Night-soil is collected every fourteen days, or more often whenever necessary, and deposited outside the village in holes dug for that purpose, and covered in. Slops and household refuse are deposited on to certain grounds appointed for that purpose outside the village.

(3). Contagious diseases have not been prevalent here except a few cases of Whooping Cough and Influenza. One Small-pox case occurred in the village; the patient, a female, was isolated, and her dwelling watched during her sickness, and the premises were disinfected and fumigated after her recovery. There is no Infectious Diseases Hospital here. I believe the hospital has been abandoned by the Government, which I think is a mistake, as it was the only one in the whole district.

(4). It has not been necessary to remedy any sanitary defects, as the place is always fairly clean and well-kept. Even the location is in a very fair state as to cleanliness, etc.

(5). No rats have been heard of or seen in the place.

(6). There is no Health Officer employed by the Municipality.

## STOCKENSTROOM.

## (i) BALFOUR (VILLAGE MANAGEMENT BOARD).

(1). The water-supply in this sub-division was of good quality and plentiful up to a few years ago, but as forest fires take place in the forests under Government control, almost every year, this has destroyed so much of these fine forests that, in consequence of this, our water-supply has fallen off considerably. We are still, however, better off for water than any other sub-division in this district.

(4). There are no sanitary defects; the Board enforces cleanliness as far as possible.

(7). The Dairy Act, 1891, has not been adopted, there being no dairies.

Health generally has been excellent in this sub-division since the beginning of the year.



## (ii) BELLVALE (VILLAGE MANAGEMENT BOARD).

No report furnished.

## (iii) BERGMANSHOEK (VILLAGE MANAGEMENT BOARD)

(1). The Bergmanshoek water-supply is derived from a tributary of the Elands River, the source of which is a deep-seated spring on the Katberg, and which is not under the control of the Local Authority.

The water is distributed by open furrows; the supply is adequate, and the water is of the purest and is not liable to pollution, as the source is no great distance from the location, and the latter is but sparsely populated.

(2). There is no system of disposal of night-soil and other refuse, as the inhabitants of the location live isolated at great distances from each other.

(3). There have been no infectious diseases during the half-year.

(5). No steps have been taken by the Board for the extermination of rats, but the farmers prevent their becoming too prevalent, as it is in their own interests to do so from an agricultural point of view.

(6). No Health Officer is employed by the Board as the District Surgeon is sufficient for any cases of Senile Decay, etc.

## (iv) BUXTON (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—The supply is by open furrow, and owing to the drought has been bad during the past six months, although the quality has been good.

(2). Owing to this being a long, scattered village, there is no regular system of collection of night-soil, etc.

(3). There have been two cases of Typhoid Fever in the village; both cases recovered. No hospital accommodation was necessary.

(4). Nil.

(5). No rats have been found about the village.

(6). No Health Officer is employed.

## (v) CATHCART VALE (VILLAGE MANAGEMENT BOARD).

There have been no alterations in sanitary arrangements since the report for 1903. The sanitary arrangements are satisfactory, and no infectious or contagious diseases have been reported during the past half-year.

## (vi) DAVID SCHEEPERS (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is derived from the river, which also supplies the village of Seymour, one mile from here. The supply has been satisfactory and pure.

(2). Night-soil is deposited at a great distance from the dwelling-houses.

(3). There have been no infectious diseases in this area.

(4). There are no overcrowded dwellings here.

(5). Rats are plentiful in this area. Steps have been taken to exterminate them, but without success.

(6). The District Surgeon is employed when any outbreak of disease occurs.

## (vii) EBENEZER EAST (VILLAGE MANAGEMENT BOARD).

No report furnished.

## (viii) ELANDS RIVER (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—The water is supplied to this area from dams constructed in the rivers outside the boundary, and is conveyed to the erven by open furrows. The supply is pure and adequate, except during seasons of drought.

(2). Night-soil and Refuse.—These are deposited on the erven in the absence of a system for collection, which is not required.

(3). Infectious Diseases.—There has been no disease for some time past.

No hospital accommodation has been provided, such not being required.

(4). Remedying of Sanitary Defects.—No action has been taken as there are no defects.

(5). No rats exist in this area.

(6). No Health Officer is employed.

*(ix)* EYRE (VILLAGE MANAGEMENT BOARD).

- (1). The water-supply is good and is conveyed in an open furrow.
- (2). No system of night-soil collection exists.
- (3). No infectious diseases have prevailed.
- (5). Rats are not numerous, except in the veld.
- (6). No Health Officer is employed.

*(x)* HERTZOG (VILLAGE MANAGEMENT BOARD).

No report furnished.

*(xi)* LUSHINGTON (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is usually good and pure, the main source being several springs in the location. The water is distributed by means of open furrows, which are exclusively used for irrigation purposes, but are liable to pollution by all kinds of dirt before reaching the erven. The Board has the furrows cleaned when necessary. Erfholders are very neglectful in this matter.

(2). Night-soil, slop-water, and other refuse are usually deposited on arable lands.

(3) and (4). Nil.

(5). Rats are very prevalent in this locality, but no steps have been taken for their extermination.

(6). No Health Officer is employed.

(7). More power should be given to Local Boards to take more stringent measures in pollution of water which is a serious matter in all respects, and especially in severe droughts, which have been very prevalent of late.

*(xii)* MAASDORP (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from springs in the Katberg, and is led from the rivers in open furrows. The water is pure and is under the Local Board's control.

(2). Nil.

(3). The public health is satisfactory.

(4). Nil.

(5). Rats are prevalent, but no steps have been taken to exterminate them.

(6). No Health Officer is employed.

*(xiii)* MANCAZANA (VILLAGE MANAGEMENT BOARD).

No report furnished.

*(xiv)* MENZIES (VILLAGE MANAGEMENT BOARD).

No report furnished.

*(xv)* PHILIPTON (VILLAGE MANAGEMENT BOARD).

There is nothing fresh to report for the half-year ended 30th June, 1904.

*(xvi)* READSDALE (VILLAGE MANAGEMENT BOARD).

The health of this location is the same as last year. There is nothing new to report.

*(xvii)* SEYMOUR (MUNICIPALITY).

There has been no change in sanitary arrangements since my last report.

The sanitary arrangements are satisfactory, and no infectious or contagious diseases have been reported during the past half-year.



## (xviii) UPPER BLINKWATER (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is obtained from the river and open furrows, and is carried by buckets for domestic purposes. The water is not very pure, and not plentiful, on account of the heavy drought. In the lower part of this place the water is nearly unfit for domestic purposes. The Board does not allow pollution of the water, which is under the control of the Local Authority.

(2). As this is a very scattered village, and homesteads are a distance apart, there is no system for the collection of night-soil, etc.

(3). No cases of infectious disease occurred during the half-year, except Whooping Cough amongst the children, mostly coloured. Several deaths occurred among the coloured cases, chiefly through carelessness. A few cases of Measles occurred.

(4). No overcrowding of dwellings exists.

(5). There are no rats in this area.

(6). No Health Officer is employed.

(7). The health of the place is very satisfactory.

## (xix) UPSHER (VILLAGE MANAGEMENT BOARD).

There is nothing fresh to report since the 1903 report was furnished. The general health of the area under the control of this Local Authority is good.

## (xx) WELLSDALE (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—The water is obtained from springs under the control of the Village Management Board.

The springs are situate within this area. Dams are mainly used for storage, the water being distributed along open furrows.

All the water is quite pure.

(2). Night-soil.—This is washed away by a water furrow which flows through the w.c. Other refuse is all collected and burnt or thrown into pits.

(3). There have been no cases of any disease in this area for the last two or three years.

(4). As there are no sanitary defects, no action has been taken to remedy the present state of affairs.

(5). Rats are fairly numerous at times. Cats are kept for killing them, and at any clearing of stores large numbers are killed with sticks.

(6). No Health Officer is employed by the Local Authority. In case of any sickness the District Surgeon is called to examine the case.

## STUTTERHEIM.

## (i) STUTTERHEIM (MUNICIPALITY).

(1). No alteration has taken place in the water-supply since last report, beyond a survey having been made for the proposed water-supply for the town, in pipes from the Kologha Forest.

(2). No alteration since last report.

(3). Three cases of Enteric Fever and two cases of Scarlet Fever occurred. Infected premises were quarantined, and put under supervision of the Sanitary Inspector. No further outbreaks took place, and all the patients are now convalescent. No Infectious Diseases Hospital has been provided.

(4). No steps have been taken towards the abatement of nuisances, it not being necessary to do so.

(5). Rats are not prevalent in this Municipality.

(6). A Health Officer is employed on terms similar to those specified in last report.

## (ii) EMGWALI (VILLAGE MANAGEMENT BOARD).

The health report for this Village Management Board for the half-year ended 30th June, 1904, is in every respect the same as that for the year 1903. Reference should, therefore, be made to the last published health report.

## SUTHERLAND.

## SUTHERLAND (MUNICIPALITY).

\* Report of Dr. R. H. H. HAYDEN, Medical Officer of Health.

(1). The water-supply remains the same as stated in last report.

(2). Night-soil, slop-water, and household refuse are disposed of as stated in last report.

(3). There have been fourteen cases of Diphtheria and nine cases of Enteric Fever in the village during the first half of this year, and no steps have been taken by the Municipality to prevent the spread of these diseases, beyond instructions given to the friends of persons sick with these diseases by the Health Officer, as to keeping the sick persons isolated and disinfecting clothing, houses, and excreta, etc.

The Health Officer made it known amongst the residents the necessity of having all sore-throats examined as soon as possible, so that any cases of Diphtheria might be treated as soon as the disease appeared in any person.

There is no Infectious Diseases Hospital in this village.

(4). Some regulations, at the suggestion of the Health Officer, have been drawn up with the intention of preventing overcrowding, but these regulations have not yet come into force.

No other steps have been taken under this section.

(5). Rats are unknown in this village, but there are a great many mice in the houses.

(6). A Health Officer is employed by the Local Authority to examine all cases of supposed or suspected infectious and contagious diseases, and to advise and report on matters of public health generally when required.

## SWELLENDAM.

## (i) SWELLENDAM (MUNICIPALITY).

There have been few cases of infectious diseases notified at the Town House. Only two cases of Diphtheria were reported, both patients being brought in from the country, and both sources of infection were uncertain.

The general health of the community has been good.

## (ii) BARRYDALE (VILLAGE MANAGEMENT BOARD).

(1). Water-supply.—The water comes from springs in the mountains, and is conveyed to the village in open furrows. It is very pure, the furrows being kept clean and in good order, and is adequate for all requirements. The source does not belong to and is not under the control of the Board, but the owners of the lands have to allow it a free course.

(2). The night-soil is still being disposed of by the inhabitants themselves, as is also household refuse.

(3). No infectious diseases have prevailed, the health of the village being generally good.

(5). There are no rats here.

(6). No Health Officer is employed by the Local Authority.

## (iii) HEIDELBERG (MUNICIPALITY).

There is nothing further to add to the report for 1903.

## (iv) ZUURBRAAK (VILLAGE MANAGEMENT BOARD).

No report furnished.



## TARKASTAD.

## TARKASTAD (MUNICIPALITY).

\* Report of Dr. W. H. FERGUS, Medical Officer of Health.

(1). Water-supply.—Its source is a series of springs rising through boreholes; it is brought by iron pipes a distance of half-a-mile to a storage reservoir situated at the upper end of the village. The source of water is in the commonage, and the supply is under the control of the Municipal Authorities. For domestic purposes it is caught as it escapes from the pipe leading to the reservoir, and is distributed to the houses by means of watercarts and buckets. The surplus water is collected in the reservoir, from whence it is distributed in open unpaved furrows to the water-erven in the village. The supply is fairly adequate for domestic purposes, but the system of distribution is faulty and expensive. The supply for gardening purposes is totally inadequate. The whole system of springs and pipes is being thoroughly overhauled by the Municipal Authorities, the object being to increase the supply to the town. At present, while the alterations are in progress, the water is liable to be polluted, but householders are warned to boil all water used for drinking purposes. Many of the better class houses are provided with large underground cement lined tanks, and others have iron tanks to collect rain water; and recently boring for water has been carried out by a few private individuals, with fairly successful results.

(2). The collection of night-soil is under Municipal control; the pail system is in force, and the pails when full are emptied into special carts and the contents carried to trenches situated about two miles from the village; when the trenches are nearly full they are filled in with fresh soil.

The removal of slop-water and household and other refuse is not under Municipal control, as it should be; it is carried out in a very slipshod manner. The refuse is generally carried to the dongas adjoining the village and is there deposited.

(3). There was no serious outbreak of infectious disease during the half-year; a few comparatively mild cases of Typhoid Fever prevailed, but there was no serious epidemic.

There is no hospital for infectious disease, with the exception of the Small-pox Lazaretto. This is the property of the Divisional Council, but is used by the Municipal Authorities during outbreaks of Small-pox. All other infectious diseases are treated at the residences of the patients.

No special measures were taken for preventing or dealing with outbreaks of infectious disease, as there was a marked freedom from such cases.

(5). Rats are occasionally found at the Railway Station, which is situated about a quarter-of-a-mile from the village. They are not numerous, and no special measures were taken for their extermination.

(6). A Health Officer is employed, his duties being the supervision of all outbreaks of infectious disease within the Municipal area, including the native location, and also to advise the Authorities in all matters referring to the health and sanitation of the village. The Health Officer receives a salary from the Municipal Authorities.

(7). More attention should be paid to the state of the native location and to the dongas near the location. The loose rubbish should be burnt; the latrines used by the natives should be kept clean and in good repair, and the numerous dongas surrounding the location should be filled up and levelled. The removal of slop-water should be undertaken by the Municipal Authority.

Speaking generally, there has been marked freedom from epidemics of infectious disease during the half-year. The sanitary condition of the village is practically on the same level as the previous year. The chief undertaking affecting the sanitation and health of the town was the overhauling of the water-supply.

## TEMBULAND.

## (i) CALA (MUNICIPALITY).

(1). The water-supply is obtained from a natural spring under the control of the Municipality.—Distribution is by open furrows. The supply is now considered inadequate. The water at its source is of excellent quality, but, by the method of distribution, is liable to pollution.

(2). (a) Night-soil.—The pail system is in vogue, the night-soil being removed by contract.

- (b) No special provision is made for the removal of slop-water.
- (c) Refuse is carted away to an appointed place at householders' expense.
- (3). Eight cases of Scarlatina and one case of Typhoid Fever were reported (one of the Scarlatina cases complicated with Diphtheria). No special steps were taken in regard to above cases by the Municipality.
- (4). The overseer has authority to prosecute any person contravening the Bye-laws relative to health and sanitation. Nothing has called for action on the Council's part.
- (5). Rats are seldom seen in this vicinity.
- (6). There is no properly appointed Health Officer by the Municipality; in case of need one of the local practitioners is appointed for the time being.

(ii) UMTATA (MUNICIPALITY).

(1). Water-supply.—Umtata has no artificial water-supply at present, the people relying on tanks and the Umtata River, which is a permanent and unlimited supply. The water is taken therefrom in casks drawn by natives, and is comparatively pure, there being very little pollution, and that only from surface drainage.

(2). Disposal of Night-soil, etc.—Each house provides buckets for night-soil, slops, etc., and these are emptied by the sanitary contractor at the rate of 1s. 4d. per bucket. The matter thus collected is taken out of town and buried in trenches.

The street gutters are cleaned out by Municipal boys, and rubbish thus collected is deposited in old quarries.

(3). Only one case of Small-pox was dealt with by the Council, one other case being treated at the C.M.R. Camp, the patient being a native mule driver. These cases have both been discharged as cured. In both cases the patients (both natives) were isolated in tents on the Commonage, and supervised by the District Surgeon and the C.M.R. doctor respectively, police guards being placed in charge in both cases.

No special hospital or accommodation of a permanent nature has been made by the Municipality.

(4). Remedying of Sanitary Defects.—No special steps have been rendered necessary for the better sanitation of the town beyond regular visits to all yards, streets, etc., by the Sanitary Inspector.

The river banks are patrolled by police, and any persons found depositing rubbish are prosecuted. The Sanitary Inspector reports monthly to the Council on the sanitation of the town generally, drawing attention to any cases which may require to be dealt with.

(5). Rats.—These are fairly numerous in town, but not sufficiently so to require steps being taken by the Council, cats, dogs or traps being used for their extermination.

(6). No Health Officer has been appointed by the Council, infectious diseases being comparatively unknown. When any cases arise they are put in the hands of one of the doctors. Formerly the only doctor here was the District Surgeon, but since last April another doctor has started here, and the District Surgeon now has an assistant as well.

(7). The town is very healthy and free from sickness of any kind, though just at present Measles are rife. There have been no fatal cases.

Special attention is paid to back-yards, butchers' shops, hotels and boarding houses, while the location is placed under a capable and diligent Headman, besides being inspected monthly by the Sanitary Inspector, who reports monthly to the Municipal Council.

Arrangements have been made with Messrs. E. G. Clifford Jones and W. T. Olive to supply the Municipality with comprehensive plans for electric lighting and a water-supply. The survey has been made, and we are daily expecting the plans and specifications for same, it being the intention of the Council to push on with these schemes as early as possible.

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TRANSKEI.

BUTTERWORTH (MUNICIPALITY).

(1). There is no organised water-supply, the water being supplied by the Gcuwa and Cegcuana Rivers, adjacent to and running through the township.

(2). A system of removal of night-soil and refuse has been adopted, and will soon be enforced.



(3). No infectious diseases have prevailed here.

The hospital, though complete in other respects, has no isolation ward.

(4). The Council have adopted bye-laws conducive to the complete sanitation of the town in every way.

(5). Rats are not prevalent in this locality.

(6). A District Surgeon is resident here, and a Sanitary Inspector is permanently appointed by the Council.

#### TULBAGH.

##### (i) TULBAGH (MUNICIPALITY).

(1). The township of Tulbagh is supplied with water from the Witzenberg in the following ways:—

(a) One portion of the stream traverses by open furrow from its source, which lies beyond the boundaries of the Municipality, through the town of Tulbagh, and is used inclusively for irrigation purposes. The supply is adequate.

(b) The other portion is conveyed through an intake tank to a reservoir in the township, a distance of about three miles, by a two-inch cast-iron pipe. From the reservoir the Municipality supply the inhabitants with excellent water for drinking and domestic purposes. The discharge, which has lately greatly diminished, owing to rusting of pipes, into the reservoir, has now, owing to cleaning of a good length of pipes, during the winter months, greatly improved. The upper portion of the township is supplied with water from the Malkops River, for irrigation purposes, and this new scheme has already been beneficial to that part of the town.

(2). The Municipality remove house refuse once per week, and night-soil, by proper conveyance, at least once per week, from every residence, and dispose thereof in a proper manner. Slop-water is not collected.

(3). No infectious diseases have prevailed during the last half-year.

(4). No overcrowding of dwellings or pollution of water takes places in the Municipality. Very few sanitary defects exist, and those are dealt with suitably.

(5). Rats are not prevalent.

(6). No Health Officer is employed permanently. The District Surgeon acts as such when necessary.

##### (ii) WOLSELEY (VILLAGE MANAGEMENT BOARD).

(1). The water-supply of the township of Wolseley (Ceres Road) is obtained from the Breede River, at the entrance of Mitchell's Pass (leading to Ceres); from which it is conveyed in open furrows. The source is situated on the farm of Waverley, and is not under the control of the Wolseley Village Management Board. The supply for household purposes is adequate, but for irrigation purposes it sometimes falls short during the summer months. The water is liable to pollution in the area outside the Village Board's jurisdiction.

(2). In connection with the second point the Board's regulation No. 8 says:—

“The Board shall provide and set apart a place within the limits of the Board where filth, night-soil, litter or rubbish may be deposited, and notice shall be given from time to time of the place or places so set apart, and no person or persons shall deposit or cause to be deposited any filth, night-soil, stable litter or rubbish on any street or public place or waste ground within the limits of the Board, except such places as the said Board shall set apart for that purpose, and any person or persons casting any filth, night-soil, stable litter or rubbish into any street or public place other than mentioned in this regulation shall be bound to remove forthwith such filth, night-soil, or rubbish at his own expense.”

(3). No infectious diseases have prevailed during the half-year.

(4). The following three additional bye-laws have been passed by the rate-payers, and are now awaiting the approval and assent of the Governor:—

(a) “That the closets (referred to in Regulation 6) be at least 10 yards away from any drinking water furrow.”

(b) “No person shall be allowed to commit a nuisance above the main furrow.”

(c) “Any person wishing to erect a hut or building within the limits of the Board on any erf shall be obliged to get the Board's permission for such a hut or building. No hut or building to be under six feet from the foundation to under the roof.”

(5). Rats are not prevalent in the district of the Wolseley Village Management Board.

(6). No Health Officer is employed by the Local Authority.



## UITENHAGE.

## UITENHAGE (MUNICIPALITY).

(1). Water-supply.—As previously explained, the water-supply for the town of Uitenhage is derived from a large perennial fountain, or “springs,” as they are called locally, situated within the limits of the Municipal Commonage, about four and three quarter miles out of the town. The source belongs to, and is entirely under the control of the Municipality. About five years ago a line of large pipes was laid down, and the whole supply from the fountain was thereby conveyed into the town, and the quantity required for domestic purposes distributed in mains leading out from a service reservoir erected at the highest part of the College Hill area. Up to the present year the basin containing the “eyes” of the fountain was left open, and the supply from the various “eyes” was led in a short open furrow to the intake of the large main. During the half-year under review, the work of covering in the “eyes” and leading the water in earthenware pipes to the intake-house was taken in hand, and it is estimated the work will be completed before the end of October.

The supply for domestic purposes is practically unlimited. After the town supply, the Cape Government Railways are accommodated with 160,000 gallons a day. The remainder of the water is then distributed over the town and the outskirts thereof in open furrows, for irrigation purposes.

(2). Collection and Disposal of Night-soil, etc.—The pail system for the collection and removal of night-soil continues in vogue. It is carried out satisfactorily by a contractor, who converts a large portion of the sterco into manure. The system is a compulsory weekly removal, but at numerous places the utensils are removed more frequently.

There is no organised system for the removal of slops and household refuse, except at a few special localities, but the system of periodical visits by the Inspector secures the necessary attention to these matters.

In the month of June the inhabitants in public meeting assembled sanctioned a loan of £31,000, for a water-borne sewerage system (exclusive of private installations), for the principal part of the township. The surveys for this important work are being actively carried out, and the plans and specifications will be prepared with all convenient speed.

(3). Infectious Diseases.—During the six months ended 30th June there were reported twenty-four cases of Enteric Fever, and two cases of Scarlatina. For the Enteric cases January month was responsible for eight, February for seven, March for six, April two, and June one. During the preceding six months only two cases of Enteric were reported; so that for the twelve months from 1st July, 1903, to 30th June, 1904, there were twenty-six cases altogether.

Early in March three cases of suspicious illness were reported to exist in a house in one of the Municipal locations. The Resident Magistrate at once communicated with Dr. Rees, Chief Plague Officer at Port Elizabeth, who arrived on the 10th and pronounced the sickness to be Plague. One of the patients died, and the other two, with all contacts, were removed to the Port Elizabeth Plague Camp. Prompt measures were taken by means of isolation of individuals, disinfection of clothing, and destruction of infected house, to stamp out the disease. These measures were successful. The infection was traced to Port Elizabeth where the man who died had been employed.

For some time past a Plague Officer has periodically visited Uitenhage, for the purpose of inspecting premises in order to ascertain whether any infected rats are to be found in the town. Up to the present no trace of infected rodents has been discovered.

With regard to the establishment by the Local Authority of an Infectious Diseases Hospital, the Town Council cannot see its way, in the present mixed state of the population, and in view of the migratory habits of the natives, to undertake the erection of such an institution. It would simply mean providing, at the Council's expense, an asylum for all the infected natives in the surrounding districts.

(4). All accumulation of filth and noxious matter is strictly prohibited, and the creation of a nuisance by any person in this respect, or by neglecting to clean cowsheds, stables and yard premises, is frequently punished by prosecution and fine. Steps are also taken to prevent overcrowding in houses, and to secure the proper repair and restoration of premises that may have become unhealthy or dangerous to life or limb.

(5). Dr. R. G. Lamb was appointed Medical Officer of Health to the Municipality some years ago. The arrangement, however, does not carry any salary with



it. The agreement is that Dr. Lamb shall receive professional fees for work performed.

(6). The completing and opening of the new Cottage Hospital on a site granted by the Government, deserves to be mentioned as an event of importance in connection with the health of the town. The main building of the hospital consists of a frontage of two wings, containing wards for accommodating ten male and ten female patients respectively; with two private wards, operating theatre, kitchen, pantry, scullery, and nurses' rooms, wash-houses, etc., behind. There is also a separate structure for the accommodation of native patients, and further additions to the accommodation will be made as circumstances may require.

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#### UNIONDALE.

##### (i) UNIONDALE (MUNICIPALITY).

There is nothing to be added to the report for 1903.

##### (ii) HAARLEM (VILLAGE MANAGEMENT BOARD).

(1). The water-supply is good, and sufficient, being conveyed in open furrows from the river, which has its source from mountain springs. The source is situated partly within the area of the Local Authority, and entirely under its control. Water used for domestic purposes and irrigation is collected from the river and conveyed in open furrows, the supply being adequate and pure, but liable to pollution. The Local Authority, however, takes every precaution against possible pollution.

(2). No system of collection and disposal of night-soil and household refuse exists. Night-soil and household refuse are buried in gardens and used as manure, and this system will continue until the Local Authority is in a position to put this system on a better footing.

(3). No infectious disease has prevailed in the village, and no serious steps have been taken for preventing outbreaks of infectious diseases, as this is an isolated community, and not greatly liable to infection from without. Government instructions in regard to infectious diseases are promptly carried out.

(4). Carcasses are conveyed a good distance from the village and buried.

To prevent pollution of water, the furrows are cleansed twice a year, and washing in the main watercourse or above is strictly prohibited under penalty. The houses and dwellings of the village are at considerable distances one from the other, and are kept clean by whitewashing, and are not overcrowded.

(5). Rats are not prevalent, and no steps have been taken by the Local Authority for their extermination.

(6). No Health Officer is employed by the Local Authority.

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#### VICTORIA EAST.

##### ALICE (MUNICIPALITY).

(1). The water-supply is obtained from the Tyumie River, and is under the control of the Municipality, and is situated within the Municipal area. The water is taken out of the river by open furrow. Except in dry seasons, the supply is more than sufficient for the use of the town, and is pure, but is liable to pollution, as all open furrows are.

(2). Night-soil is removed by contract, and is deposited in proper pits below the town. The pits are fenced in with a wire fence. Household and other refuse is also removed by contract, and deposited in pits outside of the town.

(3). During the last six months the health of the town has been good. There is no Infectious Diseases Hospital in the Municipality.

(4). A Water Fiscal and two men are employed to constantly attend to the water furrows, so as to keep them as clean as possible. Houses are not overcrowded.

(5). Rats are not very prevalent in the town; the inhabitants do their best to exterminate them.

(6). The Municipality does not employ a Health Officer.



## VICTORIA WEST.

## (i) VICTORIA WEST (MUNICIPALITY).

\* Report of Dr. T. E. JONES, Medical Officer of Health.

(1). The water-supply of the town of Victoria West is derived from a spring at the poort or west boundary of the village, and is led down to the erfholders a portion of the way by means of a zinc shoot. The water is liable to pollution at its source, and along the major portion of its course.

(2). The collection of night-soil is carried out very satisfactorily by a contractor, under the direction of the Local Authority.

The system for the removal of slop-water is in my opinion still inadequate and unsatisfactory. In the large majority of instances the inhabitants dispose of their slop-water by throwing it over their yards and gardens. I am afraid that the energy of some people does not take them farther than their kitchen doorstep, and from there they shower all manner of liquids upon the soil. I am persuaded that the daily pollution of the soil near dwellings caused by this method of disposal of slops is responsible for a large proportion of preventable disease and mortality. I am of opinion that our Local Authority should provide for its removal by means of a tank wagon, specially used for that purpose.

Household and other refuse is removed by a contractor under control of the Municipal Council. The work is satisfactorily done.

(3). (a) Enteric.—Nine cases. The usual precautions were taken, provision being made for special disposal and disinfection of excretion.

(b) Diphtheria.—One case.

(c) Scarlet Fever.—Fourteen cases; with one or two exceptions, of a very mild nature; a few days indisposition and the patients were able to be about. Consequently, it was not difficult to isolate patients at their own houses, there being no other provision for their accommodation here. There were no fatal cases. I feel sure that there must have been quite a number of cases not seen by a medical man.

(d) Whooping Cough has been very prevalent, and there have been a number of deaths from this condition, particularly among native children, when it has usually been complicated with Broncho Pneumonia.

(e). Mumps has been epidemic since the month of March, and still prevails, but in the very large majority of cases without any complication.

(4). Frequent inspections of tenements suspected of overcrowding have been made, and some cases have been dealt with by the Municipality. Native quarters have from time to time received particular attention, and one owner of a native quarter was prosecuted by the Council, and, though they failed to get conviction, I am pleased to say that they have gained their object, inasmuch as the quarter referred to is now much better kept.

(5). This town is free from rats.

(6). A Health Officer is employed, the conditions of his appointment being stated in last report.

(7). There are one or two matters of importance affecting the public health of this town which I have from time to time brought to the notice of the Municipal Council, which I think deserve some action and attention:—

(a) The provision of a Municipal abattoir situate outside the town.

(b) The provision of slabs and washing places for laundry work outside the town. Most of the washing is now done in filthy pools (the same filthy water until fresh rain falls) below the village.

(c) Better provision for the removal of slops.

(d) The great water question.

## (ii) VOSBURG (MUNICIPALITY).

\* Report of Dr. GEO. B. WILKINSON, Medical Officer of Health.

The health of this village has been excellent; two deaths from Infantile Colic and one from Senile Decay have occurred.

I am bringing before the Municipality a proposal for the erection of a public slaughter house at a suitable distance from the village, where all slaughtering must be done.



Cattle, swine and other animals are, as a rule, well kept, and are at present very few.

The native location is in a fairly clean state, and, as a rule, orderly.

There has been no infectious disease here except one case of Scarlatina.

Vaccination.—Lymph from calves No. 3391, 3393 and 3395, Graham's Town:

Whites.		Coloured.		Successful.		Unsuccessful.	
M.	F.	M.	F.	E.	C.	E.	C.
73	59	26	20	72	59	25	20
Including 2 re-vaccinations, total, 179							

Including 2 re-vaccinations, total, 179

#### VRYBURG.

##### VRYBURG (MUNICIPALITY).

(1). The Municipal Council has the control of the water-supply.

At the south-west part of the town there is a strong fountain which supplies water for drinking purposes, which is delivered by means of water-carts, and charged at so much per load. The surplus water is conserved in a dam, and runs from these in an open furrow, supplying the south side (or at least a portion of it) with water for irrigation purposes. On the top side of the town, and about three miles out on the Commonage, there is a large dam fed by springs. This water is conveyed for a distance of about two miles in 4-inch pipes, and then by an open furrow, for the rest of the way into the town. This source supplies a certain number of erfholders with water for irrigation, but is quite inadequate for all the inhabitants. Plans and estimates have been prepared for a domestic water scheme from this source, and the engineer estimates the supply at 60,000 gallons per day, equivalent to 40 gallons a day per inhabitant, estimating the number of inhabitants at 1,500.

In addition to these two sources there are a number of wells owned by erfholders who use the water both for drinking and irrigation purposes.

(2). (a) Night-soil removal is carried out by contract, and for a number of years the work has been done by the same contractor, who gives entire satisfaction.

(b) There is no systematic way of dealing with slops. Several schemes have at times been brought forward in this matter, but nothing has been done, the chief reason being that the erven are large, and the houses are a good distance from each other.

(c) The Council carts, under the supervision of the Sanitary Inspector, carry out the removal of refuse.

(3). Infectious Diseases.—During the early part of the year several cases of Diphtheria occurred, resulting in the death of two children. Every possible means were taken to prevent the infection spreading.

Infectious Diseases Hospital.—There is no special building for this, but the Council would be prepared in a very short time to erect one if necessary. A site has been chosen for the same.

(4). Overcrowding, etc.—The Sanitary Inspector has made several visits at nights to prevent overcrowding, and has kept this down, especially amongst the natives. It is regretted that a goodly number of landlords let their buildings to natives, especially so when the Council have had a proper location laid out in a healthy spot with a spruit close by.

(5). Rats are an unknown quantity in Vryburg, none having ever been seen.

(6). There is no Health Officer appointed by the Council.

(7). Cattle Kraals.—This subject has exercised the minds of the Council for a long time, especially the question of allowing stockholders to keep more cattle than is laid down in the bye-laws. A large number of persons have applied for and obtained permission to do this, but the Council have now decided that anyone applying for permission to keep more than the specified number of cattle must have a site pointed out for the purpose on the Commonage.

#### WILLOWMORE.

##### WILLOWMORE (MUNICIPALITY).

There is absolutely no change in the report from that rendered for last year, Reference should accordingly be made thereto.

## WODEHOUSE.

## (i) DORDRECHT (MUNICIPALITY).

(1). Water-supply.—The water of the town is derived from the following sources, viz.:—

(a) A reservoir of the capacity of 23,000,000 gallons; the water is conveyed into the town by means of pipes, and is distributed through stand-pipes and taps for household and general purposes.

Owing to the recent severe drought the reservoir was empty for most of the period from the 1st January, 1904, to 30th June, 1904, and no water could consequently be obtained therefrom.

(b) Springs, from which the water is distributed in the same manner as from the reservoir.

The reservoir and springs aforesaid belong to and are under the control of the Municipality, and are situated within the Municipal area.

The water-supply, with a normal rainfall, is quite adequate, and the water is pure and not liable to pollution.

During the recent drought a scarcity of water began to be felt, in consequence of which the Municipality took steps to augment the supply by means of boring.

(2). The removal of Night-soil, Slop-water, and Household Refuse.—Night-soil and household and other refuse are removed weekly, and slop-water daily by contract.

The bucket system for night-soil is in force, and the contractor does his work to the entire satisfaction of the Municipal Authorities.

(3). No notifications of infectious diseases have been made to the Municipality during the period from 1st January, 1904, to 30th June, 1904, but it is common knowledge that cases of infectious disease have occurred in the town during that period. The Municipality has repeatedly urged upon the District Surgeon the desirability of such reports, but without result; consequently it is impossible in this report to give a precise account of diseases which have occurred in the town. The Municipality is now taking steps to get the District Surgeon to send them reports from time to time.

The number of cases of Typhoid is year by year decreasing, and during the period dealt with in this report a marked improvement in this respect took place. The Council are making the cleansing of the town their chief object during the summer months, and they have specially passed a resolution directing the Municipal employes and servants to make this their chief work, in order to entirely stamp out the disease of Typhoid.

There is no Infectious Diseases Hospital, and none is required.

(4). Overcrowding of Dwellings.—There is no overcrowding of dwellings within the Municipal area, and prompt steps are taken in any cases which may occur of dangerous or unhealthy dwellings.

(5). Rats are not abnormally prevalent, and steps for the extermination of the same are unnecessary.

(6). No Health Officer is employed by the Municipality, but there is a Sanitary Inspector.

## (ii) INDWE (MUNICIPALITY).

(1). The water-supply is derived partly from the Indwe River, there being one stand-pipe near the goods' shed. The principal source of supply is rain water, which is collected in iron pipes. There is also a borehole in the Market Square, but the supply derived therefrom is inadequate.

(2). The bucket system is in use, and the night-soil is collected by Municipal carts.

(3). There have been a number of cases of Typhoid and Enteric Fever. There is no hospital accommodation.

(4). The remedying of sanitary defects is ensured by the careful supervision of the town by Municipal employes.

(5). There are very few rats in the Municipal area.

(6). No Health Officer is employed, but the District Surgeon makes reports to the Council.

(7). The insufficiency of the water-supply is the great difficulty with which this Council has to deal.



## WORCESTER.

## (i) WORCESTER (MUNICIPALITY).

\* Report of Dr. D. HUGO, Medical Officer of Health.

(1). The water-supply is obtained from the Zanddrift River, which arises in the Bokkeveld Mountains. About 12 miles up, this river is met by the Hex River, a highly polluted stream when it runs. The source has now, by means of a special proclamation, been placed under the control of the Local Authority; but it is situated far outside the boundaries of the Municipality. About four miles away the water is conveyed by means of an open furrow to the town, at the upper end of which it is received into a reservoir and distributed throughout the town by means of pipes. The supply is adequate, but the water is becoming more and more unsafe for drinking purposes in proportion to the increase of the population in the upper Hex River. I have been informed that it is contemplated to re-establish a large camp, this time for the benefit of the unemployed, at Sandhill. In that event the pollution, already existing, will be very largely augmented, be the Local Authorities never so vigilant.

(2). Night-soil is carried in tubs by means of sanitary wagons to the outskirts of the town, and there disposed of satisfactorily. There is no regular system of slop-water removal, the bulk of it finding its way in to the open furrows which traverse the town. The institution of a regular slop-water removal system will sooner or later have to be faced, unless the ratepayers can see their way to establish a sewerage system. The Town Council remove household and other refuse free of cost.

(3). During the half-year 32 cases of Enteric Fever and 14 cases of Diphtheria were notified in the Municipality. I am aware of a good many cases of ulcerated throats which may or may not have been due to Diphtheritic poison. Inspections are made on each notification, and 11 tubes of Antitoxin were supplied free for the treatment and prevention of Diphtheria. The Town Council ordered six of these tubes. There is no Infectious Diseases Hospital.

(4). The Municipality have purchased a farm some five or six miles from the town, with a view to augmenting or supplementing the present drinking water-supply, which, to a very large extent, is held responsible for prevalent diseases. This extra supply, if proved sufficient in quantity, would be of the very best quality.

(5). Rats have never been known to exist in the town until quite recently, and steps should be taken to eradicate them as soon as possible.

(6). I hold office as Health Officer, and supply monthly reports to the Town Council. I supervise all inspections, and deal with emergencies as they arise. I further act as adviser to the Local Board, being responsible for the health of the town generally.

## (ii) RAWSONVILLE (VILLAGE MANAGEMENT BOARD).

There is nothing to add to the report for 1903.

Report of the Medical Officer of Health  
for the Colony.

PART IV.

Reports of the Medical Inspectors on the working of Part I  
of "The Contagious Diseases Prevention Act, 1885."

1. CAPE TOWN.

Dr. Wm. H. Ross, Acting Medical Inspector.

The shrinkage in the number of the inmates and of registered women submitting to inspection has, I think, been affected by the strict enforcement of the Morality Act among the foreign and European women. Domestic servants, who sleep out, are also responsible for the spread of much disease, and are difficult to get at through the Lay Inspector or the Police.

Two illegitimate children have been born in the wards.

TABLE I.—SHOWING THE OPERATION OF THE CONTAGIOUS DISEASES ACT DURING THE  
HALF-YEAR ENDED 30TH JUNE, 1904.

Number of women on the Register on the 31st December, 1903 ... ..	49
Number of fresh cases registered during the half-year ended 30th June, 1904	49
Total number dealt with during the the half-year ended 30th June, 1904 ...	98
Number of women removed from the Register during the half-year ended 30th June, 1904 ... ..	29
Remaining on the Register on 30th June, 1904 ... ..	69
Voluntary Submissions under Section 14 ... ..	49
Compulsory Submissions under Section 10 ... ..	Nil.
Number of prosecutions under Section 17 ... ..	Nil.
Total number of registered women examined ... ..	98
Total number of examinations ... ..	239

TABLE II.—SHOWING CAUSES OF REMOVAL FROM THE REGISTER DURING THE HALF-  
YEAR ENDED 30TH JUNE, 1904.

Disappeared ... ..	27
Died ... ..	1
Married ... ..	1
Total ... ..	29



TABLE III.—SHOWING ADMISSIONS TO HOSPITAL, NATURE OF DISEASES AND CAUSE OF DEATH.

*Remaining in Hospital on the 31st December, 1903 ... ..	7
Total number of separate admissions, including 15 under Part II., and 6 cases from Wynberg ... ..	35
Gonorrhœa ... ..	13
Secondary Syphilis ... ..	6
Tertiary Syphilis ... ..	2
Chancroid Eruption of Vulva, etc. ... ..	14
Total ... ..	35
Discharged, including Wynberg cases ... ..	30
Total number of individuals admitted:—	
European ... ..	6
Coloured ... ..	29
Total ... ..	35
Daily average number resident ... ..	4·7
Daily stay in hospital per individual in days ... ..	32·1
Average stay in hospital per admission ... ..	45·
Average daily cost per head of all admissions ... ..	9s. 7½d.
Remaining in hospital on the 30th June, 1904 ... ..	8

\* Including 3 cases from Wynberg,

TABLE IV.—Showing the number of Women under examination during each Month since 1892.

Year.	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
January	173	132	172	195	223	263	265	305	198	278	263	190	52
February	173	138	174	207	249	273	260	311	200	301	269	189	63
March	180	147	180	201	259	294	254	324	217	300	260	114	75
April ...	186	143	184	207	266	277	247	305	188	268	225	73	87
May ...	182	138	185	216	260	258	228	299	180	239	234	49	80
June ...	196	145	182	219	252	268	228	297	179	222	226	40	69
July ...	171	146	186	217	254	261	236	267	177	239	239	38	
August	159	150	192	217	256	280	266	239	178	242	251	43	
September	171	159	189	215	254	275	255	221	201	265	234	54	
October	181	164	196	214	264	280	277	171	209	259	236	50	
November	175	166	201	215	262	279	295	174	229	260	227	50	
December	134	165	202	225	270	273	289	187	267	259	219	52	

TABLE V.—SHOWING ADMISSIONS TO HOSPITAL FROM WYNBERG DURING THE HALF-YEAR ENDED 30TH JUNE, 1904, AND THE NATURE OF THE DISEASES.

Remaining in hospital on the 31st December, 1903 ... ..	3
Total number of separate admissions during the half-year ended 30th June, 1904 ... ..	6
Gonorrhœa ... ..	5
Secondary Syphilis ... ..	0
Tertiary Syphilis ... ..	1
Chancroid Eruption of Vulva, etc. ... ..	0
Total ... ..	6
Total number of individuals admitted:—	
Europeans ... ..	0
Coloured ... ..	6
Total ... ..	6
Remaining in hospital on the 30th June, 1904 ... ..	None.
Average duration of stay on each admission to hospital (in days) ... ..	35·87

TABLE VI.—SHOWING THE NUMBER OF ADMISSIONS AND THE NATURE OF THE CASES DEALT WITH UNDER PART II. OF THE ACT.

Remaining in hospital on the 31st December, 1903 ... ..	13
Total number of admissions during the half-year ended 30th June, 1904:—	
European ... ..	3
Coloured ... ..	12
Total ... ..	15
Nature of diseases for which patients were admitted during the half-year:—	
Gonorrhœa ... ..	3
Secondary Syphilis ... ..	3
Tertiary Syphilis ... ..	2
Chancroid Eruption of Vulva, etc. ... ..	7
Total ... ..	15
Discharged during the half-year ended 30th June, 1904 ... ..	21
Remaining on the 30th June, 1904 ... ..	7

2. WYNBERG.

Dr. H. CLAUDE WRIGHT, Medical Inspector.

There is very little variation in the working of the Act in this district during the first half of this year as compared with former years. Although the women who are examined are *bona-fide* prostitutes, and do not try to evade the examination, there is a number who are of the mixed servant and prostitute class who are difficult to lay hold of. They are in domestic situations during the day, but proceed to their own homes at night and occupy the interval in the prosecution of prostitution. Some of these women are on the register, or rather some on the register are domestic servants, that is to say, they take situations and remain in them until their mistresses discharge them at the end of a month or so, during which time I do not strike them off the register, for the reason that they would have to be put on again as soon as they lose their situations. In some instances, mistresses give them permission to attend for examination as I always inform them by letter so soon as I know they have taken them into their service. In this case, so long as they remain in service, I examine them only once a month, and then chiefly in the interests of the family as I explain to them. They are only too glad to adopt this course, but it shows to what lengths the community are put for labour of a domestic character to be compelled to engage women of this character.



## 3. SIMON'S TOWN.

Dr. H. CLARKE, Medical Inspector.

The Contagious Diseases Prevention Act, of 1885, worked very well in this Division during the half-year ended June 30th, 1904, and I would direct attention to my report for 1903, in which I pointed out its success during that year.

The following table shows the results:—

Number of women on the Register, 31st December, 1903 ... ..	37
Number of new cases registered during the half-year ... ..	3
Number of women removed during the half-year ... ..	6
Number of women examined during the half-year ... ..	40
Voluntary submissions under Section 14 of the Act ... ..	35
Compulsory submissions under Section 10 ... ..	5
Number of separate periodical examinations ... ..	738
Number of admissions into Hospital ... ..	14
Average duration of stay in Hospital ... ..	38 dys.

In my report for 1903 I mentioned the satisfaction of the Naval and Military authorities with the Act, and I now attach an extract from an unsolicited letter written to me by the Senior Medical Officer of His Majesty's Fleet on this Station, Fleet Surgeon Donald T. Hoskyn, M.B. I think if this letter is read in conjunction with the statement made by the Director General of the R.N., when the Act was first put in force here in 1888, the result will be considered startling:—  
“Simon's Town and St. Helena are stated to have caused the greater part of the disease, more especially the former locality.”

H.M.S. Crescent,

Simon's Bay, July 16th, 1904.

“I have much pleasure in testifying to the complete success of the working of the Contagious Disease Prevention Act in Simon's Town, in proof of which I beg to bring to your notice the fact that between the date of our arrival at Simon's Town, 18th April, and the end of last quarter, there has not been a single entry on the sick list due to venereal disease contracted at that Port. The Crescent, during this period, had an average daily strength of 583, and 763 officers and men were at one time or another on the ship's books. I may mention as a contrast that before leaving Portsmouth at the commencement of the commission, there were six entries on the sick list for syphilis primary, eleven for syphilis secondary, five for gonorrhœa, and four for sequelæ of gonorrhœa; and one of the last, after a severe illness, had to be invalided home as his constitution was ruined.”

## 4. EAST LONDON.

Dr. J. BARCROFT ANDERSON, Medical Inspector.

There are at present practically no Europeans in town who are liable to be dealt with under this Act, a consequence of the operation of Act 36, of 1902.

Amongst the native women there has been very little sickness, otherwise the working of the Act, as far as they are concerned, has remained unchanged.

## 5. KING WILLIAM'S TOWN.

Dr. HENRY M. CHUTE, Medical Inspector.

Under Part I. of the Act, ten women have been dealt with; of these two were found to have been diseased and were admitted into hospital.

The number of cases sent to this hospital for treatment from East London, under Part I. has been five.

Part II. of the Act continues to work satisfactorily: natives voluntarily avail themselves of the advantage of the hospital for obtaining treatment, and during

the half-year there have been 22 admissions. Remaining on December 31st, 1903, 2 males, 0 females. Admitted during half-year, 14 males, 12 females, making total of 16 males, 12 females dealt with during half-year. Of these, 13 males and 11 females were cured, leaving 3 males and 1 female under treatment on June 30th, 1904.

The average daily cost of each patient was 3s. 9½d.

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#### 6. PORT ELIZABETH.

Dr. J. UPPLEBY, Medical Inspector.

748 examinations were made, the number of women being 100, composed of 12 Europeans and 88 coloured. Eighteen women were found to be diseased and were duly treated at the Lock Hospital, the average stay there being twenty-two and three-quarter days ( $22\frac{3}{4}$ ), and the daily average number of women in hospital being 8. There were 2 cases of Syphilis and 16 cases of Gonorrhœa. Two new cases were placed on the register (voluntary). There were 16 prosecutions under Section 17 of the Act. The average cost per diem of each patient under treatment was two shillings and one farthing. The internal working of the hospital has been satisfactory, discipline being well maintained and the women under treatment willing and cheerful in performing the usual domestic duties.

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#### 7. UITENHAGE.

Dr. J. UPPLEBY, Medical Inspector.

Sixty examinations were made, the number of women examined being eleven, two of whom were found to be affected with Gonorrhœa. Four women who were on the Register on 31st December, 1903, disappeared without having presented themselves for examination. There were no new cases placed on the Register, and no women have died during the half-year. There were two prosecutions under Section 17 of the Act. The average cost per diem of the women found to be affected, and who were treated in the Port Elizabeth Lock Hospital, was two shillings and one farthing.

394.





